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Attorneys for UAE Intervention Group

### BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations

Docket No. 09-035-23

#### PREFILED SURREBUTTAL TESTIMONY OF KEVIN C. HIGGINS

#### [REVENUE REQUIREMENT, COST OF SERVICE, RATE SPREAD]

The UAE Intervention Group ("UAE") hereby submits the Prefiled Surrebuttal

Testimony of Kevin C. Higgins on revenue requirement, cost of service and rate spread issues.

DATED this 30<sup>th</sup> day of November, 2009.

/s/ \_\_\_\_\_

Gary A. Dodge, Attorneys for UAE

#### **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing was served by email this 30<sup>th</sup> day of November, 2009, on the following:

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/s/ \_\_\_\_\_

# BEFORE

# THE PUBLIC SERVICE COMMISSION OF UTAH

Surrebuttal Testimony of Kevin C. Higgins

on behalf of

UAE

Docket No. 09-035-23

[Revenue Requirement, Cost of Service, Rate Spread]

November 30, 2009

1		SURREBUTTAL TESTIMONY OF KEVIN C. HIGGINS
2		
3	INT	RODUCTION
4	Q.	Please state your name and business address.
5	A.	My name is Kevin C. Higgins. My business address is 215 South State
6		Street, Suite 200, Salt Lake City, Utah, 84111.
7	Q.	By whom are you employed and in what capacity?
8	A.	I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies
9		is a private consulting firm specializing in economic and policy analysis
10		applicable to energy production, transportation, and consumption.
11	Q.	Are you the same Kevin C. Higgins who previously filed direct and rebuttal
12		testimony in this proceeding on behalf of UAE?
13	A.	Yes, I am.
14		
15	<u>OVE</u>	CRVIEW AND CONCLUSIONS
16	Q.	What is the purpose of your surrebuttal testimony?
17	A.	My surrebuttal testimony responds to the following issues:
18		(1) Various net power cost matters discussed in the rebuttal testimony of
19		RMP witness Gregory N. Duvall;
20		(2) New information presented in RMP's rebuttal testimony regarding rate
21		spread; and

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22		(3) Various cost-of-service issues discussed in the rebuttal testimonies of
23		RMP witnesses C. Craig Paice and Scott D. Thornton, DPU witnesses Jonathan
24		Nunes and Joseph Mancinelli, and OCS witness Paul Chernick.
25	Q.	What are the primary conclusions of your surrebuttal testimony?
26	A.	I offer the following primary conclusions:
27		(1) I accept Mr. Duvall's correction to my adjustment to system net power
28		costs for the updated forward price curve dated June 30, 2009. This correction
29		reduces my adjustment to system net power costs to \$(1,667,878).
30		(2) I find Mr. Duvall's response to my arguments concerning intra-hour
31		and inter-hour wind integration costs to be unpersuasive; therefore, I continue to
32		recommend adoption of the adjustments to the Company's wind integration costs
33		presented in my direct testimony.
34		(3) Based on RMP's correction to its cost-of-service study presented in its
35		rebuttal filing, I have modified my proposed rate spread to tighten the bandwidth
36		to +/- 0.5 percentage point on either side of the system average rate increase
37		(excluding special contracts). I have also modified my recommendation relative
38		to the proposal in my direct testimony by moving Residential and Schedule 8
39		customers to the uniform percentage increase and moving Schedule 6 customers
40		to a below-average increase. UAE's surrebuttal rate spread is presented in Tables
41		KCH-SR1, 3, 4, and 5, corresponding to the various revenue changes being
42		recommended by parties to this docket. Alternatively, I continue to believe that
43		an equal percentage revenue change for all rate schedules would be reasonable.

44	(4) I acknowledge that the approach used by RMP to allocate income tax
45	expense by class appears to comport with the Commission orders cited by Mr.
46	Paice in his rebuttal testimony. However, I believe the allocation approach is
47	conceptually incorrect and inconsistent with the approach adopted in a recent
48	Questar Gas Company case. I respectfully suggest that the Commission should
49	adopt the methodology change that it approved for Questar Gas Company's class
50	cost-of-service study in Docket No. 07-057-13. I recommend that this change be
51	extended to RMP's cost-of-service studies, so that the interpretation of class
52	relative rates of return will be consistent across dockets, in addition to more
53	accurately reflecting class relative rates of return.
54	(5) I continue to recommend that the Commission order RMP to correct
55	its depiction of Utah class cost of service such that distribution cost of service
56	does not vary between the Rolled-in and MSP cap revenue requirements. The
57	approach suggested by Mr. Paice in response to my critique of RMP's treatment
58	of the MSP rate mitigation cap would not produce reasonable results for cost-of-
59	service purposes. Instead, it is preferable to treat the MSP rate mitigation cap as
60	an adjustment to the generation expenses allocated to Utah, as described in my
61	direct testimony.
62	(6) While the correction in the Company's rebuttal cost-of-service study
63	has significantly reduced the problematic "gap" between Utah jurisdictional load

and Utah class load, it has not eliminated it. I continue to maintain that this issue

64

- requires further analysis, including reconsideration of the Company's decision to
   cease calibrating class loads to jurisdictional loads.
- (7) Mr. Nunes misconstrues the purpose of the sensitivity analysis 67 presented in my direct testimony, which tested whether measurement error was 68 potentially causing significant shifts in cost-of-service responsibility assigned to 69 census-measured classes (Schedules 8 and 9). Indeed, RMP's rebuttal correction 70 71 to its cost-of-service study significantly reduced the cost allocations to Schedules 8 and 9, which is entirely consistent with the results of my sensitivity analysis and 72 73 confirms that my concern was valid. Mr. Nunes' comments on my sensitivity 74 analysis should be disregarded.
- (8) Utah jurisdictional load factor is not 72% as indicated by Mr.
  Mancinelli, but is no greater than 59.2%, and is probably somewhere in the
  vicinity of 55%. Thus, if the Average and Excess Demand method were used to
  allocate costs in Utah, the demand-related costs allocated to classes based on
  energy would be in the range of 55-59%, rather than 72% as indicated by Mr.
  Mancinelli.

(9) I do not agree with Mr. Mancinelli's suggestion that the Commission
establish a working group to discuss, identify, and recommend the appropriate
cost classification for various kinds of generation resources within the PacifiCorp
system. I believe the Commission and Utah parties have already given significant
time and attention to these classification issues and the Commission has
consistently held that 75% demand/ 25% energy is the appropriate basis for

87		allocating production costs to classes in the Utah jurisdiction. I am not persuaded
88		that re-arguing the classification issue among the interested parties in a working
89		group would be a productive expenditure of time and money. Instead, I believe
90		effort would be better directed to investigating the load measurement
91		discrepancies that remain unresolved in the Utah jurisdiction.
92		
93	<u>NET</u>	POWER COSTS
94	<u>Resp</u>	oonse to Gregory N. Duvall
95	Q.	What aspects of Mr. Duvall's rebuttal are you addressing?
96	A.	I respond to Mr. Duvall's rebuttal testimony regarding the application of
97		the updated forward price curve dated June 30, 2009; wind integration costs; and
98		RMP's proposed adjustment to its direct case for higher BPA charges.
99	Q.	Please begin by responding to Mr. Duvall's rebuttal testimony regarding the
100		updated forward price curve that you utilized in your direct testimony.
101	A.	In my direct testimony, I recommended using an updated forward price
102		curve dated June 30, 2009 to set net power costs. On page 6 of his rebuttal
103		testimony, Mr. Duvall provides corrections for certain items omitted in my
104		adjustment. The result of Mr. Duvall's corrections is that my adjustment to
105		system net power costs for the updated forward price curve is reduced to
106		approximately \$(1.7) million.
107	Q.	Do you accept Mr. Duvall's correction?
108	A.	Yes.

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#### 109 **Q.** Do you have any other comments on this issue?

110A.Yes. In offering his correction, Mr. Duvall stated that UAE failed to111present its adjustment in a fair and accurate manner. In response, I note that the112instructions RMP provided UAE in discovery for performing this calculation were113vaguely worded with respect to the items that Mr. Duvall states were omitted. In114the future, clearer documentation for performing this calculation would be115helpful.

# Q. Turning to wind integration costs, what is your response to Mr. Duvall's rebuttal testimony on this subject?

A. Mr. Duvall responds to my arguments concerning both intra-hour and
 inter-hour wind integration costs on pages 36-40 of his rebuttal testimony.

RMP's intra-hour wind integration expense is based on the Company's 120 claim that it needs 295 MW of incremental reserves to provide intra-hour 121 regulation support to its wind fleet. In my direct testimony, I agreed that it is 122 appropriate to include the cost of incremental reserves needed for RMP to 123 "regulate up" in response to reductions in intra-hour wind generation output. 124 125 However, I argued that there should be no incremental costs assigned to retail customers when RMP "regulates down" in response to increases in wind 126 generation that occur within the hour, because backing down units to 127 accommodate greater wind output does not require the Company to carry 128 incremental reserves. Therefore, I removed 74 MW of reserves that RMP had 129 included for "regulating down." 130

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Mr. Duvall replies to my argument to remove reserves for "regulating

131

down" as follows: 132 133 When wind output is increasing, the Company must reduce other generation output in a manner that it would not have otherwise to operate the system in an 134 economic manner. This may involve decreasing hydro generation to inefficient 135 levels or ramping up out of the money resources so they can be ramped back 136 down while the wind ramps up. These costs are not already being recovered from 137 customers because they are not included in GRID.<sup>1</sup> 138 139 This strikes me as a very tortured rationale to justify the significant 140 charges RMP is seeking to levy on customers to accommodate intra-hour 141 *increases* in wind output. We need to bear in mind what is supposed to be 142 happening when RMP is "regulating down." Wind output is increasing during the 143 hour, and the Company is backing off its most expensive resources in its dispatch 144 stack, similar to what occurs when load drops during the hour. Mr. Duvall offers 145 146 no explanation as to why incremental reserves would be needed to perform this activity. Further, it is not at all clear how the gyrations described by Mr. Duvall 147 above translate into a need for additional reserves, which is the form in which 148 149 RMP is seeking to recover intra-hour wind integration costs. In summary, I find Mr. Duvall's response to my argument concerning 150 intra-hour wind integration costs to be unpersuasive. 151 **Q**. What is your response to Mr. Duvall regarding inter-hour wind integration 152 costs? 153 RMP assumes that all inter-hour wind integration occurs through market 154 A. sales and purchases. As I discussed in my direct testimony, from a MWh 155

<sup>&</sup>lt;sup>1</sup> Rebuttal testimony of Gregory N. Duvall, p. 40, lines 869-874.

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175	Q.	What is your response to this argument?
174		generation." <sup>2</sup>
173		purpose and cannot be also used to provide for [inter]-hour variations in wind
172		"Reserves that are meant to cover forced outages need to remain available for that
171		Mr. Duvall replies that my argument amounts to double-counting, stating:
170		function of supporting both intra-hour and inter-hour wind integration.
169		carried for this purpose. I argued that these reserves are able to provide a dual
168		wind integration costs assumes that 295 MW of incremental reserves will be
167		that RMP's analysis fails to consider that the Company's calculation of <u>intra</u> -hour
166		In my direct testimony, I disputed the inclusion of these costs, pointing out
165		hour wind integration cost.
164		purchases and sales constitutes 100 percent of the cost of RMP's proposed inter-
163		premium applied to the total volume of projected inter-hour wind integration
162		will sell at \$0.50/MWh below market for every inter-hour sale. This transactional
161		that it will pay \$0.50/MWh above market for every inter-hour purchase and that it
160		would produce a net incremental energy cost of zero but for RMP's assumption
159		knowledge about when they would occur, such offsetting sales and purchases
158		in GRID would be incorrect for determining net power cost. In the absence of
157		inter-hour wind integration purchases – otherwise the underlying MWh modeled
156		standpoint, "planned" inter-hour wind integration sales must equal "planned"

<sup>&</sup>lt;sup>2</sup> Ibid., p. 38, lines 820-823. Mr. Duvall's statement referenced *intra*-hour variations in wind, but it is clear from the context of his statement that he meant *inter*-hour variations.

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176	A.	Mr. Duvall does not respond to my argument on its merit. I am not
177		double-counting, as I do not propose that reserves needed for forced outages be
178		used for inter-hour wind integration. Rather, my argument is based on the 295
179		MW of incremental reserves that RMP assumes will be needed for intra-hour
180		wind integration (or alternatively, the 221 MW of incremental reserves required
181		after reserves claimed for "regulating down" are removed). This reserve is
182		incremental to the 5 percent operating reserve "to cover forced outages" for wind
183		resources that RMP assumes in calculating net power cost.
184		In carrying these incremental reserves, RMP will be able to respond to
185		changes in inter-hour wind forecasts without having to rely exclusively on market
186		transactions. For instance, if wind output suddenly drops, this incremental reserve
187		is available to provide the required intra-hour increase in supply ("regulating up").
188		In planning for the next hour, the Company will then take account of the fact that
189		its wind output has fallen, and the need for intra-hour regulating reserves in the
190		next hour has fallen along with it. This means a portion of the intra-hour reserves
191		that customers are already paying for can be available to support inter-hour wind
192		integration for the next hour. The upshot is that RMP's management of inter-hour
193		wind integration should not depend exclusively – or even necessarily significantly
194		- on market transactions when some portion of the 221-295 MW in incremental
195		reserves is also available for this purpose. As the entirety of the Company's
196		claimed inter-hour wind integration cost is derived from assumed transactional
197		premiums on purchases and sales, the elimination of the assumed exclusive

dependence on the market for inter-hour wind integration also eliminates thisclaim.

In summary, for Utah ratemaking, the Company's attempt to introduce 200 inter-hour wind integration costs represents a new category of costs. RMP's claim 201 for recovering these alleged costs fails to consider that the Company's claim of 202 203 intra-hour wind integration costs assumes a substantial increase in reserves that 204 can provide a dual function of supporting both intra-hour and inter-hour wind integration. Mr. Duvall's response to this argument does not address the 205 206 argument on its merit. The Company bears the burden on this issue and has not met it. Therefore, I continue to recommend that the Commission adopt my 207 208 proposal to adjust net power costs to remove the Company's claim for inter-hour wind integration costs. 209

Q. What are your comments on RMP's proposal to adjust its direct case to
recover increased BPA charges?

On page 7 of his rebuttal testimony, Mr. Duvall acknowledges that the 212 A. 213 Company's rebuttal net power cost should reflect OCS's Adjustment E.13, which 214 updates BPA's wind integration charge to reflect the final decision in BPA's rate case. According to Mr. Duvall, this change results in a reduction in system net 215 power cost of approximately \$1.5 million. At the same time, Mr. Duvall states 216 217 that the rebuttal net power cost should also reflect the new prices of the BPA peaking contract and the Grant County purchase contract, both of which were 218 made available by BPA on the same day as its final decision on revised wind 219

220	integration charges. According to Mr. Duvall, this update increases system net
221	power cost by approximately \$8.0 million. Over \$7.9 million of this proposed
222	increase is associated with the BPA peaking contract.
223	On the one hand, the comparable treatment of these changes in BPA prices
224	proposed by Mr. Duvall appears reasonable. At the same time, the fact that BPA
225	was seeking a rate increase for its peaking contract (along with wind integration
226	charges) was known (or knowable) to RMP at the time the Company filed its rate
227	case (even though the final decision was not yet known). In its February 2009
228	Wholesale Power Rate Initial Proposal, BPA calculated an Average System Cost
229	("BASC") of \$41.90/MWh. Rather than using this projected price in the
230	calculation of the peaking contract price in a manner consistent with its use of
231	BPA's projected wind integration charges, RMP appears to have prepared its
232	direct case using the Fiscal Year 2009 BASC of \$33.00/MWh. Thus, the
233	Company's proposed rebuttal update to reflect the final price of \$40.42/MWh
234	appears to be a correction of its own oversight in its initial filing.

235

Q.

### What do you recommend?

A. All things considered, I believe RMP's correction is accurate and should probably be accepted, unless it is inconsistent with the Commission's policy or practice for allowing a party to correct omitted or inaccurate information from its own direct testimony that inures to its benefit. At a minimum, it strikes me as reasonable for the increase in BPA peaking contract prices to be used to offset the

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- reduction in BPA wind integration charges, in light of the fact that these two pricechanges were determined by the same seller on the same date.
- 243

#### 244 **RATE SPREAD**

# Q. What new information is presented in RMP's rebuttal testimony regarding rate spread?

In its rebuttal filing, RMP made a significant correction to the inputs used 247 A. in its cost-of-service study. In direct testimony, UIEC witness Maurice Brubaker 248 and I independently criticized the inputs used in RMP's cost-of-service study 249 presented in RMP's direct case. Our criticisms emphasized the significant 250 discrepancy between the jurisdictional load allocated to Utah in the jurisdictional 251 allocation model relative to the sum of Utah class loads used in the cost-of-service 252 study. As shown in Table KHC-5 in my direct testimony, there was a very 253 material "gap" between these two measures of 9.6% for the test period. In 254 response to this issue, RMP reevaluated and corrected its method for aligning 255 historical hourly load research data with the projected class usage on the monthly 256 257 forecasted peak days. This correction is described in the rebuttal testimony of C. Craig Paice and Scott D. Thornton. 258

As a consequence of this correction, there are significant changes in the Company's cost-of-service results. Of note, consistent with the arguments presented by Mr. Brubaker and me, the correction demonstrates that the initial RMP study produced unreasonable revenue deficiencies for Schedules 8 and 9.

- Also of note, the revised analysis shows that Residential customers are not overrecovering, as previously indicated.
- Given the new results of the Company's rebuttal cost-of-service study,
- 266 RMP witness William R. Griffith has proposed a new rate spread that he applies
- to RMP's revised proposed revenue requirement increase of \$55 million
- 268 (excluding special contract customers). In his rebuttal rate spread, Mr. Griffith
- 269 moves the proposed percentage increase for Residential and Schedule 8 customers
- to the uniform system increase, while retaining a 1.0 percentage point above-
- average increase for Schedule 9 and Schedule 10. His proposed increase for
- certain Lighting rate schedules also remains 1.0 percentage point below the
- 273 system average.

#### **Q.** What is your assessment of Mr. Griffith's rebuttal rate spread?

A. Generally, I agree with the direction of his proposed rate spread.

However, I believe it is appropriate to tighten the range of proposed increases to

- +/-0.5% on either side of the average retail increase. In addition, I believe it is
- appropriate to recognize a below average increase for Schedule 6 of 0.5%.
- A comparison of RMP's proposed rebuttal rate spread and my proposed
  rate spread are presented in Table KCH-SR1, below.

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#### Table KCH-SR1

Compa	rison of RMP R	lebuttal Spread	d and UAE S	Surrebuttal Spread
	@ \$5	5 Million Reve	enue Increas	se

285			RMP	Rebuttal	UAE Reco	mmended
286			Recomme	nded Spread	at RMP Rebu	ittal Increase
287	Class	Schedule	<u>(\$000)</u>	<u>(%)</u>	<u>(\$000)</u>	<u>(%)</u>
288	Residential	1,3	\$21,992	3.85%	23,541	4.13%
289	GS – Large	6,6A,6B	\$15,719	3.85%	\$14,138	3.47%
290	GS - 1 MW +	8	\$4,521	3.85%	\$4,840	4.13%
291	GS – High Voltage	9,9A	\$7,739	4.85%	\$7,132	4.47%
292	Irrigation	10,10TOD	\$531	4.85%	\$490	4.47%
293	GS – Small	23	\$3,941	3.86%	\$4,217	4.13%
294	Other	Various	\$517	3.05%	\$602	3.55%
295	Total Retail		\$54,961	3.97%	\$54,961	3.97%

296

281

282 283 284

# Q. Why do you believe it is appropriate to tighten the bands on either side of the average percentage rate increase relative to RMP's proposal?

In my direct testimony I supported the Company's proposed bandwidth of A. 299 300 +/- 1.0 percentage point on either side of the average percentage increase, despite my strong misgivings concerning the inputs used in the cost-of-service study, 301 based in part on the magnitude of the variations in the class results. RMP's 302 303 rebuttal cost-of-service study shows these variations to be significantly reduced, particularly with respect to the Schedule 9 and Residential classes. Indeed, when 304 the Company's presentation of class relative rates of return is corrected to reflect 305 calculated income taxes (as discussed in my direct testimony), the variation in 306 returns across classes is even closer than in the Company's rebuttal results, as 307 308 shown in Table KCH-SR2, below.

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309		Table KCH-SR2		
310				
311	Comparison of Class	s Earned Returns – Income Ta	axes Allocated	vs. Calculated
312				
313	EARNED RATE OF F	RETURN BY RATE CLASS – RM	P DEPICTION (A	LLOCATED)
314				
315			Earned	Earned
316			Return on	Rate of
317	Schedule		Rate	Return
318	<u>No.</u>	Description	Base	Index
319	1	Residential	7.62%	1.00
320	6	Gen. Service – Large	8.45%	1.11
321	8	Gen. Service - + 1 MW	7.77%	1.02
322	7,11,12,13	Street & Area Lighting	17.68%	2.31
323	9	Gen. Service – High Voltage	5.98%	0.78
324	10	Irrigation	3.26%	0.43
325	15	Traffic Signals	6.69%	0.88
326	15	Outdoor Lighting	43.82%	5.74
327	23	Gen. Service – Small	8.67%	1.13
328	25	Mobile Home Parks	7.63%	1.00
329	SpC	Customer A	2.63%	0.34
330	SpC	Customer B	-1.85%	-0.24
331	<u>SpC</u>	Customer C	9.22%	1.21
332	Total	Utah Jurisdiction	7.64%	1.00
333				
334	Data Source: Ex	$\operatorname{hibit} \operatorname{RMP} \_\_\_ (\operatorname{CCP-3R}).$		
333				
227	ελονέο σλτε σε σ		DEDICTION (C	
220	EARNED RATE OF R	EIURN DI NAIE CLASS – UAP	DEFICITION (C.	ALCULATED)
338				
330			Farned	Farned
340			Return on	Rate of
341	Schedule		Rate	Return
342	No.	Description	Base	Index
343	1	Residential	7.56%	0.99
344	6	Gen. Service – Large	8.13%	1.06
345	8	Gen. Service - + 1 MW	7.73%	1.01
346	7,11,12,13	Street & Area Lighting	13.11%	1.72
347	9	Gen. Service – High Voltage	6.81%	0.89
348	10	Irrigation	4.78%	0.63
349	15	Traffic Signals	6.94%	0.91
350	15	Outdoor Lighting	32.66%	4.28
351	23	Gen. Service – Small	8.40%	1.10
352	25	Mobile Home Parks	7.58%	0.99
353	SpC	Customer A	4.37%	0.57
354	SpC	Customer B	1.95%	0.26
355	SpC	Customer C	8.92%	1.17
356	Total	Utah Jurisdiction	7.64%	1.00
357				

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### 358 Q. Are there additional reasons to support a tightened bandwidth?

359	A.	Yes. The correction to RMP's initial cost-of-service study results, in
360		combination with the class load measurement concerns raised in this case,
361		demonstrates that RMP's cost-of-service analysis is a work in progress,
362		underscoring the importance of using informed judgment in interpreting its
363		results. Even though the Company's rebuttal correction removes a significant
364		portion of the gap between jurisdictional costs allocated to Utah and the sum of
365		class loads, the remaining unexplained gap is still of concern. I remain troubled
366		by the implications of the Company's decision several years ago to cease
367		calibrating class loads to jurisdictional loads. These factors, in combination with
368		the results of RMP's rebuttal correction, strongly suggests that a cautious
369		approach should be taken in differentiating class rate increases. In my view, this
370		warrants a tighter bandwidth.
371	Q.	In light of your discussion above, what is your opinion of spreading rates
372		using an equal percentage change for all rate schedules?

A. In my rebuttal testimony, I stated that such a rate spread was in the range
of reasonable outcomes. In light of the discussion above, the argument in favor of
an equal percentage approach is strengthened. In my opinion, both the tighter
bandwidth I proposed above and an equal percentage approach are reasonable. **Q.** In your direct testimony, you recommended a revenue apportionment

378 approach for spreading revenue changes that differ from the Company's

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379		proposed revenue change. Do you continue to recommend that this approach					
380		be applied to your "tighter ban	dwidth" rate sj	pread proposa	1?		
381	A.	Yes. I continue to recommend that the approach described on pages 42-43					
382		of my direct testimony be used for spreading revenue changes that differ from the					
383		Company's proposed revenue change. This approach is illustrated in UAE					
384		Exhibit 1.1SR (KCH-1.1SR) usin	ng my recommer	nded rate spread	d applied both to		
385		RMP's surrebuttal revenue increase of \$55.0 million and DPU's initially-					
386		proposed revenue increase of \$8.5 million. The results of this rate spread applied					
387		to a revenue increase of \$8.5 mil	to a revenue increase of \$8.5 million is presented in Table KCH-SR3, below.				
388		Table KCH-SR3					
389		UAE Surrebuttal Ra	te Spread @ \$8.	5 Million Reve	enue Increase		
390					1 1		
202				UAE Reco	mmended		
392 202		Class	Sabadula				
204		<u>Class</u> Desidential	<u>scriedure</u>	<u>(\$000)</u> \$4.362	$\frac{(\%)}{100}$		
305		GS Large	1,5 6 6 4 6 B	\$517	0.13%		
395		GS = Large	0,0A,0D 8	\$807	0.15%		
397		GS = High Voltage	994	\$1 748	1.09%		
398		Irrigation	10 10TOD	\$120	1.09%		
399		GS = Small	23	\$782	0.76%		
400		Other	Various	\$36	0.21%		
401		Total Retail		\$8,461	0.61%		
402	Q.	Have you also calculated your	recommended 1	ate spread ap	proach to DPU's		
403		rebuttal revenue change of \$(0.	.9) million?				
404	A.	Yes, I have. These results a	are presented in '	Table KCH-SR	4, below.		

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# Table KCH-SR4

405

10.6			4. C	0 M:11: D	D
406		UAE Surrebuttal Ka	te Spreaa @ \$0.	9 Million Keve	nue Decrease
407					mmandad
400				ot DPU Sup	n Decrease
409		Class	Schedule	(\$000)	(%)
411		Residential	1 3	<u>(4000)</u> \$/195	0.09%
412		GS = I arge	6 6 4 6B	$(\$2\ 230)$	(0.55%)
413		GS - 1 MW +	8	(\$2,230)	0.09%
414		GS - High Voltage	9.9A	\$662	0.41%
415		Irrigation	10.10TOD	\$45	0.41%
416		GS – Small	23	\$89	0.09%
417		Other	Various	(\$79)	(0.46%)
418		Total Retail		(\$915)	(0.07%)
419					
420	Q.	What are the results of your re	commended ra	te spread appr	oach applied to
421		OCS's initial recommended rev	venue change o	f \$(5.9) million	?
422	A.	These results are presente	ed in Table KCH	I-SR5, below.	
423			Table KCH	-SR5	
424		UAE Surrebuttal Ra	te Spread @ \$5.	9 Million Reve	nue Decrease
425				UAE Reco	mmended
426				at OCS I	Decrease
427		Class	Schedule	<u>(\$000)</u>	<u>(%)</u>
428		Residential	1,3	(\$1,559)	(0.27%)
429		GS – Large	6,6A,6B	(\$3,689)	(0.90%)
430		GS - 1 MW +	8	(\$321)	(0.27%)
431		GS – High Voltage	9,9A	\$85	0.05%
432		Irrigation	10,10TOD	\$6	0.05%
433		GS – Small	23	(\$279)	(0.27%)
434		Other	Various	(\$139)	(0.82%)
435		Total Retail		(\$5,896)	(0.43%)
436					
437		Summary of UAE Rate Spread	Surrebuttal		
438	Q.	Do you have any summary con	nments to offer	on the subject	of rate spread?
439	A.	Yes. In this surrebuttal te	estimony, I have	modified my p	roposed rate
440		spread to tighten the bandwidth t	o +/- 0.5 percen	tage point on ei	ther side of the

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441		system average rate increase (excluding special contracts). I have also modified
442		my recommended spread relative to the proposal in my direct testimony by
443		moving Residential and Schedule 8 customers to the uniform percentage increase
444		and moving Schedule 6 customers to a below-average increase to reflect the
445		corrections in RMP's rebuttal cost-of-service analysis. I have also concluded that,
446		in light of the correction presented in RMP's rebuttal cost-of-service analysis, as
447		well as the concerns expressed in this proceeding regarding load measurement
448		issues, an equal percentage revenue change for all rate schedules would also be
449		reasonable.
450		
451	COS	T OF SERVICE
452	<u>Resp</u>	onse to C. Craig Paice
453	Q.	What aspects of Mr. Paice's rebuttal testimony are you addressing?
454	A.	I am addressing two topics that Mr. Paice discussed in his rebuttal: (1)
455		allocation of income tax expense to customer classes; and (2) the treatment of the
456		MSP rate mitigation cap for class cost allocation.
457	Q.	What is your response to Mr. Paice on the topic of allocation of income tax
458		expense to customer classes?
459	A.	In my direct testimony, I pointed out that in RMP's depiction of class cost
460		of service at current revenues, the Company allocates income tax responsibility to
461		customer classes based on each class's allocated share of rate base. I noted that
160		this is a non-standard and inaccurate depiction: at <i>current revenues</i> , the income

463	tax expense for a given class should be <i>calculated</i> based on the operating revenue
464	for return produced by that class. The Company's approach distorts relative rates
465	of return at current revenues: the relative return ratio is overstated for classes
466	earning above the average return and it is understated for classes earning below
467	the average return.
468	In his rebuttal, Mr. Paice cites prior Commission decisions in Docket Nos.
469	79-035-12 and 97-035-01, in which the Commission concluded that income taxes
470	should be allocated based on relative rate base.
471	I acknowledge that the approach used by the Company appears to comport
472	with the prior Commission orders cited by Mr. Paice. However, I believe the
473	allocation approach is conceptually incorrect and inconsistent with a very recent
474	Commission order in a Questar Gas Company case. I respectfully suggest that the
475	Commission's treatment of this issue in RMP cases should be brought into
476	conformance with its treatment of the same issue in Questar Gas cases.
477	Allocation of income taxes is a non-standard and conceptually inaccurate
478	treatment that produces exaggerated class rates of return on either side of unity.
479	The Commission's recently approved change from allocation of income taxes to
480	calculation of income taxes in Questar Gas Company's class cost-of-service
481	studies in Docket No. 07-057-13 presumably reflects the Commission's latest
482	thinking on this matter. I recommend that this same approach be extended to
483	RMP's cost-of-service studies as well, so that the interpretation of class relative

- rates of return at current revenues will be consistent across dockets, in addition to 484 being more accurate. 485
- Q. 486

487

- What is your response to Mr. Paice on the topic of the treatment of the MSP rate mitigation cap for class cost allocation purposes?
- In my direct testimony, I argued that RMP's depiction of class cost of 488 A. service at the MSP rate mitigation cap revenue requirement is conceptually 489 incorrect. I demonstrated the problem with the Company's approach by showing 490 that it produces a different distribution cost-of-service result under the Rolled-in 491 492 method than under the MSP rate mitigation cap, even though there is no conceptual basis for such a difference. This problem is further compounded by 493 the fact that RMP's allocation of distribution cost to Utah is *lower* under the MSP 494 rate mitigation cap than under Rolled-in, despite the fact that the MSP rate 495 mitigation cap produces an overall cost responsibility for Utah that is *greater* than 496 under Rolled-in. This improper treatment of the functionalized costs distorts class 497 cost responsibility. 498

In his direct testimony, DPU witness Joseph Mancinelli also critiqued 499 RMP's treatment of the rate mitigation cap. Mr. Mancinelli correctly noted that 500 the rate mitigation cap is directly related to production and therefore should be 501 entirely applied to the production function. 502

In response to my direct testimony, Mr. Paice states that he agrees there 503 may be alternative approaches to this issue, but does not believe the Company's 504 approach has produced a conceptual error. Mr. Paice goes on to assert that "the 505

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<sup>3</sup> Rebuttal testimony of C. Craig Paice, p. 21, lines 494-496.

528	that this approach might be a workable alternative to my primary
529	recommendation; however, upon further consideration, I conclude that it would
530	not adequately address the problem at hand.
531	Class cost responsibility is determined by calculating class rates of return.
532	If, by virtue of the MSP rate cap, the rate of return on generation is deemed to be
533	lower than for other functions, this lower return would be blended in with the
534	calculation of each class's overall return, distorting the relative returns among
535	classes. To see this point, assume (for simplicity) that a particular customer class
536	utilizes only the generation function, and assume further that this class is fully
537	recovering its share of Utah generation costs (i.e., it is earning the system average
538	return for generation). Yet when this class's return on rate base is compared with
539	other classes it likely would be deemed to be "under-recovering" – even though it
540	is fully recovering its costs – because the return on generation is set lower than
541	the returns on the non-generation functions. This is the problem with the
542	alternative suggested by Mr. Paice: it would not produce reasonable results for
543	cost-of-service purposes. For this reason, it is preferable to recognize the MSP
544	rate mitigation cap for what it is and reflect it for class cost of service purposes as
545	an adjustment in the generation expenses allocated to Utah.

546

# 547 **Response to Scott D. Thornton and Paul Chernick**

548Q.What aspect of Mr. Thornton's and Mr. Chernick's rebuttal testimony do549you address?

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A. I respond to their discussions of the calibration of class loads. Mr.
Thornton disagrees with my statement that the Company's decision several years
ago to stop calibrating estimated loads to the measured jurisdictional load is
causing an unreasonable detrimental impact on Schedules 8 and 9 in the cost-ofservice study. Mr. Chernick disagrees with the recommendations of Mr. Brubaker
and me to revisit the issue of calibration.

#### 556 Q. What is your response to Mr. Thornton?

As I discussed above and in my direct testimony, in RMP's direct case, the A. 557 gap between jurisdictional loads allocated to Utah and the sum of class loads was 558 9.6%. The absence of any calibration effort allowed this substantial gap to persist 559 within the Company's cost-of-service study until it was challenged in this case by 560 UIEC and UAE. To RMP's credit, in its rebuttal filing the Company revised its 561 method for aligning historical hourly load research data with the projected class 562 usage on the monthly forecasted peak days. As Mr. Thornton testifies, this 563 correction reduces the aforementioned gap to an average of about 2% for the test 564 year.<sup>4</sup> 565

The correction in the Company's rebuttal cost-of-service study, which reduces the gap between jurisdictional loads allocated to Utah and the sum of class loads from 9.6% to about 2%, does indeed reduce significantly the costs incorrectly allocated to Schedules 8 and 9. This result is entirely consistent with the thrust of my argument on this point in my direct testimony. The decision not to calibrate permitted a large, unexplained gap between Utah jurisdictional load

<sup>4</sup> Rebuttal testimony of Scott D. Thornton, p. 8, lines 151-153.

572	and Utah class loads to go unchecked in the Company's direct case. When RMP
573	took corrective steps that reduced the gap, the costs allocated to Schedules 8 and 9
574	were significantly reduced, demonstrating that the initial allocation of costs to
575	these classes was unreasonably detrimental.

Q. In response to Mr. Thornton and Mr. Chernick, do you continue to maintain
that it is necessary to revisit the decision not to calibrate class loads to the
Utah jurisdictional load?

Yes. As I stated in my direct testimony, the decision not to calibrate non-A. 579 census loads to the Utah jurisdictional load represents a methodology change that 580 was introduced by RMP several years ago, but never evaluated or approved by the 581 Commission. This change followed the issuance of a Load Research Working 582 Group Report in July 2002, which, according to RMP Response to UIEC Data 583 Request 10.23, was apparently authored by the Committee of Consumer Services, 584 whose constituency may be a primary beneficiary of the decision to discontinue 585 calibration. Mr. Thornton defends this methodology change, stating that RMP has 586 presented several reasons why class loads are not calibrated to jurisdictional loads 587 and "why the various parties who participated in the Load Research Working" 588 Group agreed it should not be done."<sup>5</sup> 589 However, the experience in this case provides very little assurance to 590 591 customers in census-measured classes that class costs are being fully and properly accounted for, in light of the Company's direct filing. While the correction in the 592

593 Company's rebuttal cost-of-service study has significantly reduced the

<sup>&</sup>lt;sup>5</sup> Ibid., p. 15, lines 312-315.

594		problematic "gap" discussed herein, it has not eliminated it. Moreover, the Load
595		Research Working Group Report, by its own admission, did not address the
596		fundamental question of why measured retail loads in Utah plus expected losses
597		do not equate to the Utah jurisdictional load, concluding that "investigation of the
598		impact of this discrepancy between measured Utah Retail Load and Utah Border
599		Load is outside the scope of this forum." <sup>6</sup> I continue to maintain that this entire
600		issue requires further analysis.
601		
602	<u>Resp</u>	<u>onse to Jonathan Nunes</u>
603	Q.	What aspect of Mr. Nunes' rebuttal testimony do you address?
604	A.	I respond to Mr. Nunes' statement that the results of the sensitivity
605		analysis presented in my direct testimony should be disregarded.
606	Q.	What is your response to Mr. Nunes' on this point?
607	A.	Mr. Nunes misconstrues the purpose of my sensitivity analysis. In
608		presenting my sensitivity analysis, I never claimed that the discrepancy between
609		the Utah jurisdictional load and sum of the class loads was wholly attributable to
610		load estimated errors, as inferred by Mr. Nunes. <sup>7</sup> If I had believed that to be the
611		case, I would have presented the analysis as a substitute cost-of-service study,
612		rather than a sensitivity analysis. Rather, as I stated in my direct testimony, I
613		performed the analysis to gauge whether measurement error is <i>potentially</i> causing
614		significant shifts in cost-of-service responsibility assigned to census-measured

 <sup>&</sup>lt;sup>6</sup> Load Research Working Group Report, p. 12.
 <sup>7</sup> Rebuttal testimony of Jonathan Nunes, p. 8, lines 135-138.

615	classes. I went on to state that if the results of the sensitivity analysis were similar
616	to RMP's results, "then the question I have raised with regard to the efficacy of
617	the cost allocation results using the sample estimates may not be material." Thus,
618	it was a way of testing whether measurement error could be ruled out as having a
619	significant impact on cost-of-service results for census-measured classes. But as
620	the analysis showed, it could not be ruled out.
621	As it turns out, RMP itself has now acknowledged that it did have a
622	significant measurement problem with respect to the sampled classes; the problem
623	identified by the Company was not related to its sampling methodology, but
624	rather how the sample load data was translated into forecasted class peak
625	demands. And, as I discussed above, the correction of this error resulted in
626	significantly-reduced cost allocations to Schedules 8 and 9 – a result that is
627	entirely consistent with the potential adjustment identified in my sensitivity
628	analysis. Thus, Mr. Nunes' dismissal of the results of my sensitivity analysis
629	should be disregarded.

630

# 631 Response to Joseph Mancinelli

# 632 Q. What aspects of Mr. Mancinelli's rebuttal testimony do you address?

A. I respond to Mr. Mancinelli's representation that the RMP system load
factor (for Utah) is 72%, as well as to Mr. Mancinelli's suggestion that the
Commission establish a working group to discuss, identify, and recommend the

- appropriate cost classification for various kinds of generation resources within thePacifiCorp system.
- 638 Q. What are your comments regarding RMP system load factor for Utah?
- A. On page 12 of his rebuttal testimony, Mr. Mancinelli presents a
- calculation indicating that the RMP annual system load factor for Utah is 72%.
- Based on this result, Mr. Mancinelli goes on to state that if the Average and
- Excess Demand method were used to allocate RMP costs, then 72% of the
- 643 demand-related costs would be allocated to classes based on energy.
- 644At first blush, a 72% load factor for Utah seems too high. Upon closer645inspection, it appears that the denominator in Mr. Mancinelli's load-factor646equation is not the Utah jurisdictional peak demand, but the Utah jurisdictional647demand at the time of the PacifiCorp system coincident peak. <sup>8</sup> The former is the648proper basis for calculating Utah load factor and is materially greater than the649latter.

Using the Utah hourly loads reported by RMP in its direct case to measure Utah demand, I calculate a revised Utah load factor of 59.2%. But even this load factor is overstated, as we now know that RMP's estimate of sampled class loads was materially understated in its direct filing. Thus, we can conclude that the Utah jurisdictional load factor is no greater than 59.2%, and is probably somewhere in the vicinity of 55%. Thus, if the Average and Excess Demand method were used to allocate costs in Utah, the demand-related costs allocated to

<sup>&</sup>lt;sup>8</sup> Somewhat surprisingly, the Utah jurisdictional peak demand apparently does not occur at the time of the PacifiCorp system coincident peak.

classes based on energy would be in the range of 55-59%, rather than 72% asindicated by Mr. Mancinelli.

Q. What is your response to Mr. Mancinelli's suggestion to establish a working
 group to discuss, identify, and recommend the appropriate cost classification

661 for various kinds of generation resources within the PacifiCorp system?

A. While I believe this suggestion is well intended, I do not support it. I 662 believe the Commission and the parties have already given significant time and 663 attention to these classification issues. Further effort and expense by the parties 664 on this issue is unwarranted. The Commission has consistently held that 75% 665 demand/25% energy is the appropriate basis for allocating production costs to 666 classes in the Utah jurisdiction. Moreover, a cost-of-service task force was 667 conducted as recently as 2005, with little or no consensus. I am not persuaded 668 that re-arguing the classification issue among the interested parties in a working 669 group would be a productive expenditure of time and resources, particularly in 670 light of the other demands on parties active in Utah regulatory matters. Instead, I 671 believe effort would be better directed in a more focused and unexplored area -672 673 investigating the load measurement discrepancies that remain unresolved in the Utah jurisdiction. 674

675 Q. Does this conclude your surrebuttal testimony?

676 A. Yes, it does.