Witness CCS – 3SR Exhibit CCS –3SR

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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In the Matter of the Application) Of PacifiCorp for Approval of) Its Proposed Electric Service) Schedules and Electric) Service Regulations) Docket No. 06-035-21

PRE-FILED SURREBUTTAL TESTIMONY OF ANTHONY J. YANKEL FOR THE COMMITTEE OF CONSUMER SERVICES

October 23, 2006

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1		INTRODUCTION
2		
3	Q.	PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS
4		ADDRESS.
5	A.	I am Anthony J. Yankel. I am President of Yankel and Associates, Inc. My
6		address is 29814 Lake Road, Bay Village, Ohio, 44140.
7	Q.	ARE YOU THE SAME ANTHONY J. YANKEL THAT HAS PREVIOUSLY
8		TESTIFIED ON BEHALF OF THE COMMITTEE IN THIS CASE?
9	A.	Yes.
10	Q.	DO YOU HAVE A SUMMARY OF THE KEY ISSUES AND CONCERNS
11		ADDRESSED IN YOUR SURREBUTTAL TESTIMONY?
12	A.	Yes I do. There has been considerable testimony submitted in this case
13		regarding Residential rate design. Some of that testimony is in agreement
14		with the Committee's position and some is opposed. As previously
15		discussed in my Direct Testimony, rate design is more of an art than a
16		science. Consequently, one would expect a variety of opinions regarding
17		how Residential rates should be established. The testimony submitted
18		provides a wide array of perspectives.
19		The Commission should recognize that it is being asked to set policy
20		(art) and is not expected to develop a precise relationship of cost causation
21		for each of the approximately 656,000 Residential customers (science).
22		While rates should be designed such that there is a reasonable expectation
23		that the Company's revenue requirement will be met and should reflect

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general cost causation principles, the Committee strongly urges the
 Commission to carefully consider the specific circumstances in this case
 and make its rate design decision accordingly.

27 All parties in this case generally agree that the growth in air-28 conditioning load (residential as well as non-residential) is one of the key 29 drivers underlying the substantial increase in Utah's summer peak load. 30 This growth in peak load has required PacifiCorp (the Company) to invest in 31 new Generation, Transmission, and Distribution facilities which has resulted 32 in upward pressure on rates. It is in the rate design phase of this case 33 where the Commission can set clear policy/pricing signals as to how that 34 growth will be addressed at the Intra-class level. I do not advocate that 35 rates be developed that are punitive to air-conditioning customers, but I do 36 not believe that it is appropriate to place the bulk of a major rate increase 37 (10.31%) on the backs of the smallest use customers that are not using air-38 conditioning.

39 Q. WILL YOUR TESTIMONY ADDRESS ALL OF THE POINTS RAISED BY

- 40 OTHER WITNESSES WHO FILED REBUTTAL TESTIMONY?
- A. No. I will limit my responsive testimony to a few of the more important
 areas where there is disagreement with the other parties or where
 statements have been made that misinterpreted or mischaracterized my
 Direct Testimony.

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46		RESPONSE TO TESTIMONY OF MR. TAYLOR AND MR. ANDERSON
47		
48	Q.	COMPANY WITNESSES TAYLOR AND ANDERSON BOTH CONTEND
49		THAT THE AVERAGE LOAD FACTORS YOU USED ON PAGES 4 AND 5
50		OF YOUR DIRECT TESTIMONY WERE DISTORTIONS OF ACTUAL
51		CUSTOMER USAGE PATTERNS ¹ . IS THIS A FAIR REPRESENTATION
52		OF YOUR TESTIMONY AND THE DATA PRESENTED?
53	Α.	No. My Direct Testimony clearly states that I averaged ² the coincident load
54		factor data of each of the approximate 150 Residential load research
55		sample customers. Apparently, the Company would prefer that I calculate
56		these values by using the "average weighted energy consumption per
57		customer" and divide by the "average weighted coincident demand per
58		customer". The Company's preferred methodology typically is used in the
59		preparation of data to be included into a cost-of-service study. Since I was
60		not incorporating this data into a cost-of-service study, there was no basis to
61		provide the data in the manner that the Company describes.
62	Q.	IS THERE A MATERIAL DIFFERENCE IN THE COINCIDENT LOAD
63		FACTOR DATA BY SIZE OF CUSTOMER THAT YOU PRESENTED AND
64		THAT PRESENTED BY MR. TAYLOR AND MR. ANDERSON?
65	Α.	No. Relatively speaking, the Company's values are smaller than mine, but
66		they show the very same trend. The values in Mr. Taylor's Rebuttal
67		Testimony on line 33 for May 2004 show the following pattern:

¹ See Mr. Taylor's Rebuttal testimony beginning on line 14 and Mr. Anderson's beginning on line 29. ² Yankel Direct lines 76-78.

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69	<u>kWh Range</u>	Coincident L.F.
70	0-400	85%
71	401-600	83%
72	601-1000	73%
73	> 1000	69%
74		

This is essentially the same correlation that I addressed in my Direct 75 76 Testimony-the greater a customer's monthly usage, the more "on-peak" a 77 customer's usage became. Given the fact that Utah's growth in summer peak load has been significantly outpacing the growth in both winter peak 78 79 load and annual energy consumption, this relationship is very important. 80 The relationship exists regardless if you calculate average coincident load 81 factors as I did or as the Company proposes. 82 The important questions to keep in mind are: what can be done 83 about this rapid growth in summer peak demand; what future costs will it 84 place upon Utah customers; and which customers are going to incur those 85 costs? Q. COMPANY WITNESS TAYLOR STATES THAT HE DEVELOPED AN 86 EMBEDDED UNIT COST OF SERVICE RESULTS FOR BOTH SUMMER 87

88AND WINTER PERIODS. DO YOU HAVE ANY OBSERVATIONS

89 **REGARDING HIS RESULTS OR METHODS?**

90 A. Mr. Taylor included³ his "embedded unit cost of service results" in his

- 91 Exhibit DLT-1R. I do not know what an embedded unit cost of service
- 92 results may be, but it appears to be quite different than an embedded cost
- 93 of service study. Mr. Taylor's embedded unit cost of service results is only

³ Starting on line 77 of Mr. Taylor's Rebuttal testimony.

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94		11 pages long. By contrast, Mr. Anderberg, in his Direct Testimony,
95		provided ⁴ the Company's "functionalized Class Cost of Service Study",
96		which consisted of three exhibits and approximately 225 pages. Given the
97		fact that even a casual review of Mr. Taylor's embedded unit cost of service
98		results indicates the format used is completely different than the format
99		used in a traditional cost of service study provided by the Company, and
100		given the one-week time frame between Mr. Taylor's supplying his Rebuttal
101		Testimony and the need to file Surrebuttal Testimony, any thorough
102		review/critique of what Mr. Taylor has provided is impossible.
103	Q.	ARE THERE ANY INITIAL OBSERVATIONS REGARDING MR.
104		TAYLOR'S EXHIBIT DLT-1R THAT YOU WISH TO OFFER?
105	A.	Yes, there are a few observations worth noting. First, Tab 1.1 of Mr.
106		Taylor's Exhibit DLT-1R seems to be more of a breakdown of
107		winter/summer rates rather than a detailed description of how the individual
108		rates in each usage block are related to cost causation. For example, line
109		26 of Tab 1.1 indicates that when using a \$3.40 customer charge, the
110		average cost per kWh in the summer is calculated by the Company to be
111		8.91 cents, while the winter cost is 6.75 cents per kWh. If the Company
112		fully agrees with this calculation, and if it believes that rates must follow cost
113		causation (calculations), then why is it proposing winter rates that are 7.387
114		cents per kWh (10% above the calculated costs for 7 months of the year) so
115		that it could charge, on average, less than the cost that it calculated for the
116		summer months? If the summer costs are 1.3 times that of winter costs

⁴ Starting on line 22 of Mr. Anderberg's Direct Testimony.

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(\$0.0891 / \$0.0675 = 1.32), then the Commission should consider making
even greater differentials in the summer/winter rates than what has been
proposed by any of the witnesses in this case.

120 A second observation is that this study seemed to allocate 121 distribution costs such as "Line Transformers" simply on the basis of the 122 non-coincident load factors of each of these groups. In the Company's cost 123 of service study, these calculations are modified by the number of customers that take service from each transformer. Because of the 124 125 increase in use of air-conditioning, the size (demand) of many residential 126 customers has been increasing and the number of customers served per 127 transformer has been going down. In this case, the Company estimated⁵ 128 that the average number of Residential customers per line transformer was six. Less than 10 years ago in Docket 97-035-01, the Company estimated⁶ 129 130 that the average number of Residential customers per line transformer was 131 eight. When the Company was making its calculations, it should have taken into account that there are fewer customers per line transformer when large 132 133 customers are being served.

Q. IS THE AVOIDED COST OF 9.12 CENTS PER KWH FOR USAGE OVER 135 1000 KWH THAT MR. TAYLOR CALCULATED ON PAGE 7 LINE 121 OF 136 HIS REBUTTAL TESTIMONY APPROPRIATE?

A. No, for two reasons. First, Mr. Taylor footnotes his calculation by indicating
that the non-generation cost of 3.63 cents per kWh does not include

⁵ Exhibit UPL_(KDA-3) Tab 5 page 8 line 21

⁶ Docket 97-035-01 Exhibit UP&L 8.8 (DLT-8) page 25 line 21.

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139 customer-related costs. According to Tab 1.1 line 11 of his Exhibit DLT-1R, 140 customer-related costs amount to \$7.78 per customer per month. This translates into \$59.6 million per year⁷ or 1.009 cents per kWh⁸ more than 141 142 what is shown on Mr. Taylor's Table 4 values. Including customer-related 143 costs with his other costs results in a "price signal" to monthly usage greater 144 than 1000 kWh of 10.124 cents per kWh—well above the 9.723 cents per 145 kWh rate that the Company proposes for summer usage over 1000 kWh. Admittedly, the Company is proposing to recover some of these customer-146 147 related costs in a customer charge, but even at the Company's proposed 148 \$3.40 customer charge over half of the customer-related costs will still need 149 to be collected in the energy rate. 150 Second, in order to calculate the generation component of this rate,

151 Mr. Taylor used a "Summer Avoided Cost" rate of 5.48 cents per kWh.

152 Although the Company's Avoided Cost rate may be appropriate for

153 purposes of purchasing power from a qualifying facility (QF), this does not

154 necessarily represent the marginal prices that the Company encounters in

- 155 the market. The Company's net power costs in this rate case include
- 156 purchases listed under the headings of APS IF, Constellation, Morgan

157 Stanley Call, Pinnacle West, PSC New Mexico, and Sempra Call. Prices for

- 158 these marginal purchases vary from 6 cents per kWh up to 13 cents per
- 159

kWh at the generation level. Likewise, the Company's projected test year

⁷ \$7.78 times (7,659,292 + 210,992 + 4,591 bills) [Exhibit UP&L_(WRG-1R) page 1] or \$61,266,527 per year.

⁸ \$61,266,527 divided by (5,937,341,758 + 132,697,889 + 3,065,510 kWh per year) [Exhibit UP&L__(WRG-1R) page 1] equals 1.009 cents per kWh.

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160marginal purchase power costs included APS, Morgan Stanley, and UBS161ranging from 6 cents per kWh to 9.1 cents per kWh. In order to represent162these values at the residential pricing level, an additional 10% would need163to be added for losses. Thus, the 5.48 cents per kWh Mr. Taylor used in his164"price signal" for usage over 1000 kWh falls well short of the costs attendant165to many of the purchase power contracts that the Company included for166recovery in this rate case.

168 **RESPONSE TO TESTIMONY OF MR. GRIFFITH** 169 170 Q. **ON PAGE 8 OF HIS REBUTTAL TESTIMONY, MR. GRIFFITH** 171 PRESENTS A GRAPH THAT HE CLAIMS DEMONSTRATES THAT ALL 172 USAGE GROUPS ARE RESPONSIBLE FOR THE INCREASE IN SUMMER KWH GROWTH. DO YOU AGREE WITH THIS 173 174 **INTERPRETATION?** No. This graph is a collection of inappropriate and misleading information 175 Α. 176 that I would strongly urge the Commission to disregard. For example, the 177 graph suggests that residential customers across all sectors increase usage 178 by the same approximate 500 kWh in the Summer compared to the Spring. 179 Anyone that has central air-conditioning would tell you that a 500 kWh 180 increase in usage due to air-conditioning is a small amount, and those that 181 do not have central air-conditioning would tell you that a 500 kWh increase 182 in usage is a very large change. Basically, this is a simple case of "averages" lying. 183 184 Another questionable result can be found in the lowest usage block 185 (55-200 kWh) that is reported to have increased from an average of 151 186 kWh in the Spring to 392 kWh in the Summer (151 + 241 = 392). This 187 suggests that there would be virtually no one with bills less than 400 kWh 188 during the Summer. In fact, the Company's bill frequency data⁹ from this 189 same year shows there were 160,908 bills or 25% of the Residential bills in

⁹ Attachment CCS 2.5-1 Tab Sch 1,2,&3 lists 160,908 bills at or below 400 kWh out of 649,888 bills

July 2004 that were at or below 400 kWh. The graph is simply a

191 mathematical result that produces deceptive and misleading information.

192 Q. WHAT IS CAUSING THE DATA IN THIS GRAPH TO BE SO

193 UNREPRESENTATIVE OF REALITY?

194 The underlying support data used to establish Mr. Griffith's graph on page 8 Α. 195 of his Rebuttal Testimony was never provided. Only minimal summary data 196 was provided—additional backup data was not retained by the Company¹⁰. Although not provided in discovery, Mr. Griffith stated in testimony¹¹ that the 197 198 "non-summer usage is the average of April and May usage" and that the 199 "summer usage is the average of July and August". Because I did not have 200 any underlying data to review, I turned to the Company's load research data 201 for this same timeframe. Relying on the load research data, I was able to 202 separate out the following data for those customers whose usage was in the 203 301-400 kWh range during April/May 2004:

¹⁰ See response to CCS Data Request 24.1

¹¹ See Griffith's rebuttal testimony page 8 lines 169 through 173

204			Apr/May	July/Aug
		<u>I.D.</u>	Ave.	Ave.
205		Number	<u>kWh</u>	<u>kWh</u>
	1	22003	315	78
206	2	22030	303	160
200	3	22027	308	205
207	4	26019	341	304
207	5	22026	337	321
• • • •	6	22057	340	322
208	7	32015	360	364
	8	22019	348	413
209	9	22013	341	416
	10	26013	329	436
210				
	11	26025	317	445
211	12	22015	337	487
211	13	42008	378	560
212	14	26027	383	621
212	15	22035	366	697
012	16	32005	379	725
213	17	22111	321	886
	18	22072	395	990
214	19	35437	362	1160
	20	22064	316	1401
215				
		Average	344	550

216

217 Despite getting different averages from the load research data compared to 218 the Company's figures I believe the results are close enough to determine what is occurring in the Company's graph. The average Spring usage from 219 220 the load research data was 344 kWh, which is close to the 352 kWh found 221 in the Company's graph for the non-summer usage. The average for the 222 load research data for these same customers only increased 206 kWh 223 compared to 326 kWh in the Company's graph, but it is a large enough 224 increase to at least analyze what is occurring.

225 The above table was arranged in order of increasing usage during 226 the summer months. Remember, that each of these customers have an

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227	average Spring usage of 301-400 kWh. The actual Summer usage lists the
228	first customer as using 237 kWh less than his Spring usage. In fact, out of
229	this sample of 20, four customers used less in the Summer than in the
230	Spring. This random variation in usage (both positive and negative) is
231	expected. What is driving the increase in Summer usage portrayed in Mr.
232	Griffith's graph are the largest four customers in this grouping, rather than
233	the group as a whole. The 20^{th} customer increased from 316 kWh to 1,401
234	kWh—I assume this was central air-conditioning. The 10 th customer
235	increased form 329 kWh to 436 kWh—I find it very hard to believe that an
236	increase of 107 kWh is associated with central air-conditioning use.
237	The implications of Mr. Griffith's graph and the testimony that I
238	believe to be most misleading is:
239 240 241 242 243	As the figure clearly shows, all usage categories experience increases in summer usage, and for many of these categories, none of their additional usage falls in the residential tailblock (over 1000 kWh).
244	The above statement is only accurate if averages are being used to
245	mask what is happening on an individual basis. On an individual basis,
246	many customers actually decrease usage and many stay relatively the
247	same. The dramatic increase in usage associated with certain customers
248	stems from the use of central air-conditioning, and those customers are
249	responsible for the apparent shift of the <u>average</u> usage for each group.
250	Contrary to Mr. Griffith's statement, customers that use central air-
251	conditioning, in fact, tend to get into the tailblock rate (over 1000 kWh). If

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252 they did not, how does the Company explain the fact that 13% of their residential customers used¹² over 1000 kWh in April 2004, while 29% of 253 their residential customers used¹³ over 1000 kWh in July 2004? 254 255 The important thing to keep in mind is not how much an individual 256 customer may, or may not, have increased their usage between Spring and Summer, and certainly not how much a group of customers increased on 257 258 average, but what the loads are during the Summer and most importantly at the time of the Summer peak. The Committee does not believe that air-259 260 conditioning load is prevalent in the under 600 kWh block and certainly not 261 in the under 400 kWh block. The Committee's rate design proposal 262 specifically targets larger, air-conditioning usage during the summer 263 months. The Committee is asking the Commission to send a stronger price 264 signal where it will do the most good-to those residential customers 265 contributing most to the increase in Summer usage and to the rapid 266 increase in Summer peak loads. 267

¹² According to Attachment CCS 2.5-1 Tab Sch 1,2,&3 560,559 out of 645,643 (87%) used less than 1000 kWh in April 2004.

¹³ According to Attachment CCS 2.5-1 Tab Sch 1,2,&3 459,397 out of 649,888 (71%) used less than 1000 kWh in July 2004.

268		RESPONSE TO TESTIMONY OF DR. ABDULLE
269		
270	Q.	PLEASE PROVIDE YOUR OVERVIEW OF DR. ABDULLE'S REBUTTAL
271		TESTIMONY.
272	Α.	Dr. Abdulle's testimony is primarily a summation of rate design criteria that
273		suggests other rate designs that the Commission can adopt and implement
274		if it places greater weight on certain policy considerations. Given the
275		circumstances in this case, I believe that a "properly derived" customer
276		charge is far less important than placing additional costs upon energy usage
277		(the commodity over which customers have control) and in particular, the
278		Summer tailblock energy charges in order to send a stronger price signal
279		that increasing usage at this time is expensive to serve. I see no reason
280		that a rate case that is mainly driven by increased Summer usage should
281		result in half of that increase being applied as a fixed charge that will have
282		its largest impact upon the smallest customers.
283	Q.	DO YOU HAVE ANY SPECIFIC CONCERNS REGARDING DR.
284		ABDULLE'S TESTIMONY?
285	Α.	Although there are many policy areas where we differ, I would like to
286		address one technical misinterpretation of the proposal I put forth in my
287		Direct Testimony. Specifically, I would like to address his claim ¹⁴ that there
288		would be a "revenue loss" of \$1.94 per customer bill because of my
289		proposal to expand the size of the first block from 0-400 kWh to 0-600 kWh

¹⁴ See Dr. Abdulle's Rebuttal Testimony page 16 lines 7 through 18.

per month. Aside from several minor numerical errors¹⁵ in Dr. Abdulle's
testimony, I would like to discuss a more appropriate way to analyze this
proposal to increase the first block from 0-400 kWh to 0-600 kWh.

Dr. Abdulle calculates "lost revenue" as the difference between what would be collected under the present 1st block rate of 6.936 cents and what would be collected for the next 200 kWh of usage under the present 2nd block rate of 7.872 cents. He then claims that this amounts to an added burden to customers in the new 2nd and 3rd rate blocks. There are a number of areas where this argument misses the mark.

299 First, assuming everything about his numerical analysis is correct, it 300 must be recognized that those incurring this increased "burden" are also the 301 very customers that benefit by it. A customer whose usage is in the 0-400 302 kWh block does not benefit if the block is increased to 0-600 kWh because their usage is confined to the 1st block. A customer that uses more than 600 303 304 kWh will (under my proposal) be required to pick up additional costs 305 because of this change in the rate blocking, but he is also the very customer that benefits from that change. Assuming that the \$1.94 figure is correct, 306 307 the customers that will be asked to make up this shortfall (usage over 600 308 kWh) are the customers that received the decrease of \$1.94 as part of their 309 bill because of this rate change, i.e., the customers would experience both a 310 decrease in the costs in the 401-600 kWh portion of his bill as well as an 311 increase in the portion of his bill over 600 kWh to balance this reduction.

¹⁵ The proposal is not to shift 299 kWh, but 200 kWh. The figure of \$13.8 should be \$13.87. The difference in revenue calculated on the basis of the same rates used in Dr. Abdulle's testimony is \$1.87 and not \$1.94.

The net effect is to place more emphasis on the price of usage over 600 kWh for those customers using more than 400 kWh per month during the Summer.

315 Second, this proposal is being made as a part of an overall increase 316 in this case and not as an isolated proposal that will reduce the bill of one 317 theoretical customer that just happens to use exactly 600 kWh during one of 318 the five summer months. As I demonstrated in my Direct Testimony, this 319 proposal does not impact anyone during the seven winter months. During 320 the five summer months, my proposal results in less than the average 321 increase for customers in the 401-600 kWh range, but they get at least a 322 5.4% increase. Thus, no customer sees a decrease as may be suggested 323 by the concept of "lost revenue".

325		SUMMARY
326		
327	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
328	A.	The Commission is being asked to make important policy decisions in this
329		case regarding Residential rate design. The Committee, charged with
330		representing the interests of the majority of Residential customers, is
331		recommending that the Commission not deviate substantially from the
332		policies that it has practiced for the last 20 years. Although a Customer
333		Charge can be calculated to be in excess of \$0.98 per month, the
334		Committee recommends that it not be increased beyond this level in order
335		to place more emphasis upon the only component upon which a customer
336		has control—their energy usage. A primary driving force behind this rate
337		case is the rapid increase in air-conditioning load (Residential and Non-
338		Residential). At the margin this load is causing significant cost increases.
339		Those marginal cost increases are not fully addressed in an average-
340		embedded cost-of-service study. While the Committee does not believe
341		that marginal cost studies should be used for revenue requirement and cost
342		allocation purposes, it believes the Commission should give consideration
343		to marginal costs when developing rate design at the class level. The
344		Committee's rate design proposal appropriately places greater emphasis on
345		the costs to serve higher use residential customers during the summer peak
346		without being punitive.

The rate design I proposed in my Direct Testimony provides a slightly 348 349 lower percentage increase for small residential customers and a slightly 350 higher percentage increase for large residential customers. Under my 351 proposal, the majority of residential customers would see slightly less than 352 the average increase. Under the Company's proposal, the majority of the 353 customers would see an above average increase and the higher use 354 customers (representing a minority of customers) would receive less than an average increase. 355

The following graph demonstrates the difference between the Company's and the Committee's Winter rate design proposals with the corresponding average percentage of bills involved.



The above graph demonstrates that the Company's rate design is more expensive during the Winter for all monthly usage below approximately 900 kWh. This represents approximately 76% of the winter bills.

363

A comparison of the Company's and the Committee's Summer rate





365

The above graph demonstrates that the Company's rate design is more expensive during the summer for all monthly usage below approximately 900 kWh. This represents just over 70% of the Summer bills. The data upon which these two graphs are based is attached as Exhibit CCS-3SR.1

370 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes it does.