

**STATE OF UTAH**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**The Application of Rocky Mountain    )**  
**Power for Authority To Increase Retail   )**  
**Electric Rates                                    )**

**Docket No. 09-035-23**

**REBUTTAL TESTIMONY OF**  
**PAUL CHERNICK**  
**ON BEHALF OF**  
**THE UTAH OFFICE OF CONSUMER SERVICES**

Resource Insight, Inc.

**NOVEMBER 12, 2009**

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1 **I. Identification**

2 **Q: Please state your name, occupation and business address.**

3 A: I am Paul L. Chernick. I am the president of Resource Insight, Inc., 5 Water  
4 Street, Arlington, Massachusetts.

5 **Q: Are you the same Paul Chernick who filed Direct Testimony in this case?**

6 A: Yes.

7 **Q: What is the purpose of your rebuttal testimony?**

8 A: I will respond to certain cost-allocation issues raised in the testimony of Messrs  
9 Joseph Mancinelli on behalf of the Division, Maurice Brubaker on behalf of the  
10 Utah Industrial Energy Consumers (UIEC), and Kevin C. Higgins on behalf of  
11 the Utah Association of Energy Users.

12 **Q: What issues do you address?**

13 A: I address the following five issues raised by these witnesses:

- 14 • Changes to Utah Retail Class allocators to be consistent with the juris-  
15 dictional study (JAM), as proposed by Mr. Mancinelli;
- 16 • Classification of wind resources as 100% energy-related in the COS study,  
17 as recommended by Mr. Mancinelli;
- 18 • Adjustment of residential and commercial summer load to reflect weather  
19 sensitivity, as proposed by Mr. Brubaker;
- 20 • Calibration of the loads of sampled classes to close the gap between the  
21 Utah peak of the JAM and that of the COS study, as proposed by Messrs  
22 Higgins and Brubaker;

- 23       •     Classification of generation and transmission plant as 100% demand-  
24             related, and allocation of that plant based solely on class-peak contribution  
25             in three summer months (June–August), as proposed by Mr. Brubaker.

26     **II. Consistency Between Jurisdictional and Class Allocation Studies**

27     **Q: What support does Mr. Mancinelli offer for his proposal that the JAM and**  
28       **COS Study factors be consistent?**

29     A: First, he suggests that Commission’s approval of the Multi-State Process  
30       Stipulation in Docket 02-035-04, which determined the JAM allocation factors,  
31       set a precedent that is also binding on the allocation factors used in the COS-  
32       study model. Second, he asserts that the JAM allocators “dictate important infor-  
33       mation related to the underlying cost drivers” (DPU Exh. 5.0 at 5).

34     **Q: Has Mr. Mancinelli provided adequate justification for requiring**  
35       **consistency between the JAM and COS study allocators?**

36     A: No, for several reasons. First, the JAM allocation factors reflect an agreement  
37       among the majority of PacifiCorp states on the use of the Revised Protocol  
38       Method, a method that does not necessarily follow cost causality. Interstate  
39       negotiations must not restrict or supersede the Commission’s decisions involving  
40       class cost-of-service matters. Second, in Docket No. 97-035-01 (Order at 113),  
41       the Commission allowed for dissimilar treatment of costs between the inter-  
42       jurisdictional and class studies for “good and sufficient cause.” Improvement in  
43       class allocations the better to reflect cost causation surely qualifies as a good  
44       and sufficient cause.

45             In fact, Mr. Mancinelli concedes that rigid adherence to JAM allocations in  
46       the COS model is inappropriate when he proposes that wind resources be  
47       classified as 100% energy-related in the COS model but not in the JAM:

48                   Given the unpredictable dispatch of wind resources, I recommend allocating  
49                   these costs based on energy only. However, using energy to allocate wind  
50                   resources in the JAM would alter the jurisdictional revenue requirement.  
51                   Recognizing that such an adjustment impacts the revenue requirements for  
52                   all jurisdictions within PacifiCorp, I recommend, that for this case, that  
53                   wind assets be separated in JAM yet remain allocated based on the SG–  
54                   System Generation Allocation factor. This approach will identify costs  
55                   associated with wind resources but will not change the RMP revenue  
56                   requirement as determined in the JAM. However, in the RMP COS model  
57                   these costs should be assigned to the production function and allocated to  
58                   the rate classes based allocator F30.

### 59   **III. Allocation of Wind Resources**

60   **Q: What is the basis for Mr. Mancinelli’s proposal to classify wind resources as**  
61   **100% energy-related?**

62   A: In his view, wind resources provide energy, but not reliable capacity. He asserts  
63   that this departure from strict application of JAM allocations in the COS study is  
64   warranted because wind is “fundamentally a different type of resource compared  
65   to traditional fossil-fuel generation” (DPU Exh. 5.0 at 5).

66   **Q: Do you have any response to Mr. Mancinelli’s proposal to classify wind**  
67   **resources as 100% energy-related?**

68   A: I do agree that wind resources should be allocated primarily on energy, but not  
69   entirely. Wind resources do have some capacity value that should be recognized  
70   for classification purposes.

71                   I do not agree with Mr. Mancinelli’s contention that wind merits a different  
72                   approach from other resources simply because it is a new technology and non-  
73                   fossil-fueled. This distinction is irrelevant to cost-based classification. Rather,  
74                   *all* generation plant should be classified based on the causes of the investment  
75                   and on the resulting benefits.

76 **IV. Effect of Weather on Loads**

77 **Q: What is Mr. Brubaker's criticism of RMP's weather normalization?**

78 A: The utility adjusts the historical class load data to a monthly energy forecast that  
79 "is based on the 20-year average monthly temperatures" (UIEC DR 2.14). As I  
80 understand Mr. Brubaker's testimony, he asserts that RMP's weather-normaliza-  
81 tion of the energy forecast understates the peaks of rate classes with weather-  
82 sensitive loads. He contends that, instead, the load data from 2008 (already a  
83 very hot summer) should be adjusted to an energy forecast that assumes some  
84 extraordinary weather conditions.

85 **Q: Is Mr. Brubaker correct?**

86 A: No, for at least three reasons. First, RMP's COS study reflects a projection of  
87 normalized revenues, costs and loads based on historical load profiles. Mr.  
88 Brubaker has not explained what data he would rely on in his extreme-weather  
89 COS study, let alone justify its implementation.

90 Second, the variability of class load within each month, which is the  
91 primary determinant of the relative class loads at peak, is derived from RMP's  
92 historical load profile for each rate class and is therefore designed to contain  
93 realistic peaks.

94 Third, Utah experienced a very hot summer in 2008, and the 2008 class  
95 load profiles actually reflect higher-than-normal temperatures.

96 **V. Reconciling Jurisdictional and Class Load Estimates**

97 **Q: Please summarize the proposals by Mr. Brubaker and Mr. Higgins to adjust**  
98 **or "calibrate" Utah class peak loads so that they equal total Utah**  
99 **jurisdictional peak loads?**

100 A: Beginning on Page 13 of his direct testimony, Mr. Brubaker asserts that the sum  
101 of Utah class-peak loads should approximate the total Utah peak load used in  
102 the JAM and that any difference or gap between the Utah class and jurisdictional  
103 loads must be due to the Company's failure to accurately estimate the peak loads  
104 for the classes (primarily Schedules 1, 6, 23, 10) without interval meters, whose  
105 loads shapes are based on sampled data. He further alleges that (1) the under-  
106 stated loads for the sample classes results in an over-allocation of costs to  
107 Schedules 8 and 9 (at 14, ll. 21–24) and (2) if the class loads are calibrated to  
108 the total jurisdictional peak load through upward adjustments to the peak loads  
109 of the sampled classes, then COS results are much closer for the major classes  
110 (at 19, ll. 6–11).

111 Mr. Higgins makes a similar argument, but in much less detail.

112 **Q: Do you agree with Mr. Brubaker's underlying premise that the Utah class**  
113 **peak loads should equal the total Utah jurisdictional peak load and**  
114 **subsequent recommendation that sampled rate classes' peak demands**  
115 **should be calibrated upwards to close the gap between the class and**  
116 **jurisdictional totals?**

117 A: No, for two reasons.

118 First, as Company Witness Thornton indicates at 10–11 of his direct  
119 testimony, the Utah jurisdictional and Utah class-peak load forecasts are based  
120 on different methodologies. There is no reason to expect the two methods to  
121 produce similar results, and there is no need for them to do so. Allocations are  
122 based on the *relative* peaks of jurisdictions in the JAM and of retail classes in  
123 the COS model.

124           Second, other factors may contribute to the “gap” between the Utah  
125 jurisdictional and class loads that are unrelated to errors in load research data.

126 For example, the following factors may cause the figure to diverge:

- 127       • Partial requirements customers would likely be included in the jurisdic-  
128           tional peak-load total but not included in the sum of class peak-load totals.
- 129       • Loss factors are estimated and may understate peak losses on very hot,  
130           high-load days.
- 131       • Measurement of border loads is uncertain, as discussed by Mr. Thornton in  
132           his direct testimony at 11) and by The Load Research Working Group  
133           Report to the UPSC (July 1, 2002, at 12).

134 These and other factors are unrelated to errors in load-research data.

135           Arbitrarily increasing the estimated loads of the sampled classes would  
136 likely overstate their cost responsibility. Therefore, I recommend that the  
137 Commission continue to recognize the distinctions between methods for  
138 forecasting jurisdictional and class peak loads as set forth in Mr. Thornton’s  
139 direct testimony and not adopt Mr. Brubaker’s calibration proposal.

## 140 **VI. Allocation of Generation and Transmission Plant**

141 **Q: What is Mr. Brubaker’s proposal for classifying costs of generation and**  
142 **transmission plant?**

143 A. Mr. Brubaker proposes that 100% of PacifiCorp’s generation and transmission  
144 plant be classified as demand-related.

145 **Q. Does Mr. Brubaker take the position that fuel costs have no effect on**  
146 **resource decisions?**



147 A: No. Mr. Brubaker recognizes that “different technologies have different  
148 combinations of fixed costs and variable costs” and that the economic resource  
149 choice depends upon the amount of energy the system requires from the plant.

150 **Q: Then why does Mr. Brubaker propose classifying all generation plant as**  
151 **100% demand-related?**

152 A: He contends that once generation plant is installed, its costs are constant over  
153 the year, and therefore “fixed” in the short run. In Mr. Brubaker’s view, all  
154 “fixed” costs are 100% demand-related; only costs that vary in the short run in  
155 response to load levels should be considered energy-related.

156 **Q: Does this argument have any merit?**

157 A: No. Nothing about “fixed” costs makes them inherently demand-related. Mr.  
158 Brubaker does not show that costs that are invariable over the period of a year  
159 are caused by or serve only peak demand, rather than energy. Mr. Brubaker  
160 attempts to use semantic legerdemain to replace “demand-related” with “fixed in  
161 the short term,” rather than offer any useful evidence on cost causation.

162 Indeed, the concept of “fixed” generation costs is anachronistic. Long ago,  
163 a utility that had a coal plant that was not needed for its own load at a particular  
164 hour would have no choice but to turn down the coal plant. Today, with the  
165 extensive interconnection of utility systems, unused capacity can be traded into  
166 off-system markets. Consequently, it is no longer realistic to consider generation  
167 plant as a fixed burden on ratepayers.

168 Embedded cost studies consider the cost basis for the investment, including  
169 the economic tradeoffs that led to the resource decision. The purpose of COS  
170 studies is to determine a fair sharing of the costs and benefits of existing plant  
171 investment. Classes with high load factors throughout the year benefit more

172 from the low-cost energy from baseload plants than do low-load-factor classes,  
173 so they should pay more of the fixed costs of the baseload plants.

174 The Commission has firmly rejected Mr. Brubaker's position that all  
175 generation and transmission costs are driven by peak loads and I recommend  
176 that it continue to do so.

177 **Q: Does Mr. Brubaker suggest an alternative approach?**

178 A: Mr. Brubaker recognizes that utilities select resources to minimize the costs of  
179 meeting their load shapes, and describes a hypothetical analysis of the genera-  
180 tion system that could be constructed for each customer class in isolation. How-  
181 ever, he considers this analysis to be impractical and does not recommend it.

182 **Q: Is there any merit in Mr. Brubaker's argument that only his hypothetical**  
183 **approach would be appropriate?**

184 A: No. Mr. Brubaker proposes one conceptual approach for dividing up the costs of  
185 generation between energy and demand, which would require a complicated  
186 analysis of the optimal supply mix for hypothetical mini-utilities (including  
187 reserves) and the development of rules for allocating each actual plant,  
188 purchase, sale, and associated fuel and energy charges among those hypothetical  
189 utilities. I have proposed a much simpler approach, based on the peaker method.  
190 Other approaches may also be reasonable. The role of the Commission is to  
191 choose among feasible causation-based approaches, of which mine is the only  
192 one in the record. Mr. Brubaker's suggestion that some impossible method  
193 would be ideal, and the Commission should therefore throw up its hands and use  
194 his arbitrary 100% demand allocation, is untenable.

195 Even if his impractical alternative approach were appropriate, which I do  
196 not believe, Mr. Brubaker does not demonstrate that it would produce anything  
197 close to a 100% demand allocation, or that a 100% demand allocation is even

198 close to a simple second-best option. My analysis suggests that, if anything,  
199 100% energy allocation is more appropriate for coal plants than 100% demand.

200 **Q: What is the basis of Mr. Brubaker's proposal that all generation plant be**  
201 **allocated among classes on a 3-CP allocator?**

202 A: In his view, the summer peak in Utah is increasingly dominant and drives the  
203 need to build or acquire capacity (Brubaker Direct at 20–21).

204 **Q: Has Mr. Brubaker demonstrated that loads in the other nine months have**  
205 **no effect on PacifiCorp's resource planning decisions?**

206 A: No. PacifiCorp's power-supply system is affected by all twelve monthly peaks,  
207 for the following reasons:

- 208 • The PacifiCorp system has a strong winter peak. The Company invests in  
209 generation resources to meet the year-round needs of the PacifiCorp  
210 system, not just the Utah jurisdiction alone.
- 211 • PacifiCorp normally schedules generating-unit outages during fall or spring  
212 months. Thus, it must have generation resources to meet demand when  
213 some units are unavailable because of scheduled outages in the shoulder  
214 periods.
- 215 • Loads outside the summer months contribute to the loss-of-load probability  
216 and therefore affect the need for capacity.
- 217 • Loads in non-summer months reduce PacifiCorp's ability to sell capacity  
218 in the wholesale market, increasing net power cost.

219 **Q: Has Mr. Brubaker provided any evidence that the Commission should**  
220 **supplant the existing 12-CP Method with a 3-CP Method?**

221 A: No. Mr. Brubaker has provided no evidence that PacifiCorp plans and operates  
222 its system in a manner that would support moving to a 3-CP generation allocator.

223 **Q: Does this conclude your testimony?**

224 A: Yes.