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ATTORNEYS FOR NUCOR STEEL, A DIVISION OF NUCOR CORPORATION

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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| 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, Consisting of a General Rate Increase of Approximately \$161.2 Million Per Year, and for Approval of a New Large Load Surcharge | Docket No. 07-035-93 |
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**TESTIMONY OF MARK DRAZEN
ON BEHALF OF NUCOR
[COST OF SERVICE AND RATE DESIGN]**

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,
Consisting of a General Rate Increase
of \$161.2 Million Per Year, and for
Approval of a New Large Load Surcharge

Docket No. 07-035-93

Direct Testimony of Mark Drazen Cost of Service and Rate Design

**on Behalf of
Nucor Steel-Plymouth, a Division of Nucor Corporation**



DRAZEN CONSULTING GROUP
Energy & Regulatory Economics

July 21, 2008

1 **Direct Testimony of Mark Drazen**

2

3 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

4 A Mark Drazen, 8000 Maryland Avenue, Suite 1210, St. Louis, Missouri, USA, and 1405
5 Fairfield Road, Victoria, B.C., Canada.

6

7 **Q WHAT IS YOUR OCCUPATION?**

8 A I am a consultant in the field of public utility economics and regulation and a member of
9 Drazen Consulting Group, Inc.

10

11 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

12 A I have worked in this field since 1972 in rate cases, regulatory analysis, project planning
13 and negotiations throughout the United States (40 states and federal jurisdiction) and
14 Canada (eight provinces and federal jurisdiction). Our firm has been in this field since
15 1937. I have degrees in mathematics and engineering from the Massachusetts Institute
16 of Technology. Details are given in Nucor Exhibit 1.1.

17

18 **Q ON WHOSE BEHALF ARE YOU TESTIFYING?**

19 A I am testifying on behalf of Nucor Steel-Plymouth, a division of Nucor Corporation and a
20 contract industrial customer of Rocky Mountain Power (RMP).

21 **Q WHAT IS THE SUBJECT OF THIS TESTIMONY?**

22 A This testimony concerns Rocky Mountain Power’s proposed Schedule 500, the
23 “alternative pricing proposal for new large loads” presented in the testimony of RMP
24 witness Mr. William Griffith and discussed by RMP witness Dr. Karl McDermott.

25

26 **Q PLEASE SUMMARIZE THE MAIN POINTS IN YOUR TESTIMONY.**

27 A Rocky Mountain Power has proposed that load additions over 10 MW be charged rates
28 higher than the rates for existing loads over 10 MW and higher than the rates for load
29 additions smaller than 10 MW. Mr. Griffith says that this is because the cost of new
30 supplies exceeds the embedded cost of existing supplies and that large new loads are
31 contributing to rapid growth in total load. Dr. McDermott characterizes the large load
32 surcharge as a form of “marginal cost pricing,” which, he says, is supported by economic
33 theory in order to promote efficient consumption decisions.

34 In fact, RMP’s proposal is simply a version of vintage pricing, not marginal cost
35 pricing. As such, it is unreasonably discriminatory in that customers with similar service
36 characteristics would pay different rates simply based on their date of attachment to
37 the system. Moreover, the treatment of growth is inconsistent, in that different rates
38 would apply to the load growth of some customers than to that of other customers.

39 This is not a new concept. Similar proposals have been made—and repeatedly
40 rejected—for more than 30 years. In fact, a similar idea was proposed for the inter-

41 jurisdictional allocation of PacifiCorp's costs and was rejected by this Commission.

42 Although the concept may seem appealing, it is not based on sound economics, conflicts

43 with well-established regulatory policy and is impracticable. I recommend that Rate

44 500—and the underlying rationale—be rejected.

45

46 ***RMP's Proposal***

47 **Q PLEASE EXPLAIN THE COMPANY'S PROPOSAL IN MORE DETAIL.**

48 A Rocky Mountain Power's witnesses talk about using "marginal cost principles," but in

49 reality this is a version of vintage pricing. Mr. Griffith has proposed that any *new* load

50 over 10 MW be subject to surcharges, as specified in a new Rate 500. In order to have

51 surcharges apply only to part of the load, Mr. Griffith says that "the incremental load

52 amount would be separately metered" (Page 17, Line 390). The effective surcharge over

53 the regular rate would be 25% starting August, 2008, and increasing to 30% starting

54 August, 2009.

55

56 **Q WHAT REASONS DOES HE GIVE FOR THIS PROPOSAL?**

57 A He summarizes the rationale for this proposal thus:

58 *The combination of the large difference and the anticipated significant load growth in Utah*
59 *is creating two significant problems:*

60

61 *1. Because marginal costs are significantly higher than system average embedded costs,*
62 *and new loads in Utah are not paying the full marginal cost of service, new large loads*
63 *will create upward pressure on the rates of all Rocky Mountain Power Utah customers.*

64
65 2. *Average embedded cost pricing is sending poor price signals and may be encouraging*
66 *new customers to make fuel choices that are not economically or societally optimal.*
67 (Page 15, Lines 335-344)
68

69 According to his testimony, the “cost of generation to serve new load” is 5.8¢ per kWh
70 or more, as compared to an embedded cost of 4.2¢ per kWh for generation and
71 transmission (Page 15, Lines 325-332). Load additions over 10 MW are predicted to add
72 246 MW over the next five years (Page 14, Lines 319-323). This is about 7% relative to
73 the 2006 normalized peak of 3,600 MW, or an average of 1.3% annually. To put this in
74 perspective, this is less than half the expected annual growth for Utah as a whole
75 (2.67%), as shown in PacifiCorp’s February, 2008 *Integrated Resource Planning Public*
76 *Input Meeting*¹ (excerpt attached as Nucor Exhibit 1.2).

77 Mr. Griffith then refers to the testimony of Dr. McDermott to explain “the
78 advantages of marginal cost pricing” (Page 17, Line 378).

79

80 **Q WHAT DOES DR. MCDERMOTT SAY?**

81 A His testimony is a discussion of the “importance of marginal cost pricing” (Page 5, Line
82 15). Dr. McDermott’s testimony is general in nature. It does not present any analysis of
83 Rocky Mountain Power’s costs. He starts off by saying:

84 *This proposal, as I understand it, would set the generation component of rates for specified*
85 *large, new loads based on marginal cost principles. That is, the rates for these customers*
86 *would be set to recognize that the marginal cost of providing service is higher than the*

¹ www.pacificorp.com/File/File79834.pdf

87 *average embedded cost. I have also been asked to provide my opinion on the merits of this*
88 *proposal from a theoretical and regulatory policy perspective. (Page 3, Lines 62-67)*

89

90 He goes on to explain the “importance of marginal cost pricing in economic theory”

91 (Page 5, Lines 95-96). This is the usual argument that:

92 *Marginal cost pricing results in a price signal that produces an efficient allocation of scarce*
93 *societal resources. Consumers should consume only that amount of energy where the*
94 *additional resources that society must employ to meet that additional consumption are*
95 *equal to the value consumer’s[sic] place on that additional consumption. (Page 5, Lines 97-*
96 *101)*

97

98 Further on (Page 7, Line 131), he makes reference to Professor Alfred Kahn and quotes

99 from his book (*The Economics of Regulation*):²

100 *Then, if consumers are to decide intelligently whether to take somewhat more or somewhat*
101 *less of any particular item, the price they have to pay for it (and the prices of all other goods*
102 *and services with which they compare it) must reflect the cost of supplying somewhat more*
103 *or somewhat less—in short, marginal opportunity costs.*

104

105 Dr. McDermott says that “marginal cost pricing” is needed “immediately”:

106 **Q. What is the current situation facing Rocky Mountain Power that warrants the**
107 **immediate application of marginal cost pricing?**

108

109 **A. The Company is rapidly approaching a disequilibrium situation where the demand, i.e.,**
110 **customer load, will significantly exceed the supply, i.e., available generating capacity.**
111 **Mr. Griffith describes a situation in which industrial customers alone are expecting to**
112 **increasing load in the next five years by approximately 400 MW, which represents over**
113 **ten percent of the Company’s current Utah peak demand. Much of this new load will be**
114 **in new facilities with annual demands ultimately exceeding 10 MW. (Griffith, Dir.) (Page**
115 **14, Lines 283-291)**

116

² Cambridge, MA, 1988, MIT Press, Page 66.

117 **Q DOES DR. MCDERMOTT'S TESTIMONY SUPPORT THE COMPANY'S PROPOSAL?**

118 A Not really. Arguments about the superiority of "marginal cost principles" are not new;
119 the issue has been discussed since the 1970s. Although Dr. McDermott says that
120 "marginal cost has nearly unanimous theoretical support from the economists" (Page
121 12, Line 254), it has nearly unanimous lack of support as a basis for regulating utility
122 rates. There is no "immediate need" for a change in pricing method; RMP's situation is
123 not much different than that of many other utilities, nor different than circumstances
124 encountered by utilities in the past. Of the 246 MW of new large load projected to
125 come on line in the next five years, one customer accounts for about 40% of the total
126 and part of that customer's load is already up and running in 2008 (per the response to
127 UIEC Data Request 16.2).

128

129 **Q YOU SAID THAT RMP'S PROPOSAL IS NOT REALLY "MARGINAL COST PRICING," BUT**
130 **"VINTAGE PRICING." WHAT IS THE DIFFERENCE?**

131 A "Vintage pricing" means that customers pay different rates depending on when they
132 attach to the system. Rocky Mountain Power's proposal, like others I am aware of,
133 really rests on the concept that "new customers should pay the cost of new facilities"—in
134 this case, new generation supply. This means, among other things, that two customers
135 receiving identical service will pay different rates simply because one became a
136 customer earlier than the other. "Non-vintage" pricing is the norm—all (similar)

137 customers pay the same rate without regard to the date on which they became
138 customers.

139 True marginal cost pricing, on the other hand, would not discriminate among
140 customers based on vintage. All customers would pay the marginal cost. In this respect,
141 vintage pricing is inconsistent with “marginal cost principles.” Finally, the Company’s
142 proposed rate is not even based on the actual marginal costs. It is, rather, an arbitrary
143 percentage adder to the otherwise-applicable rate. For example, the response to UIEC
144 Data Request 16.4 says that the 25% and 30% surcharges “were not derived based on
145 any specific quantitative analysis” but, instead, were chosen “so that the resulting prices
146 for new large loads would be somewhat less than those that would be supported based
147 on alternative quantitative approaches.”

148

149 **Q DOES DR. MCDERMOTT SUPPORT A VINTAGE APPROACH OR A NON-VINTAGE**
150 **APPROACH TO PRICING?**

151 **A** That is not clear. Toward the beginning of his testimony, he says:

152 *For example, marginal cost pricing better matches cost causers with cost payers. Since*
153 *marginal cost, by definition, is the cost of producing additional output, **those customers that***
154 ***consume additional output are matched with the costs that are caused to produce that***
155 ***output.** (Page 6, Lines 113-116, emphasis added)*

156

157 Here, Dr. McDermott seems to use the notion that “new load is the cause of new
158 supply.”

159 However, later on he takes a somewhat different tack:

160 *Actually, to be economically efficient, **all load and all components of rates should be priced***
161 ***at full marginal cost** in order to avoid the subsidies, provide the correct signals for load*
162 *growth and minimize rate pressure on existing customers. (Page 15, Lines 312-315,*
163 *emphasis added)*

164
165 ***My preference as an economist, therefore, is to move to marginal cost pricing for all***
166 ***customers during all times of the year, at least for generation services. This would provide***
167 *all customers with the right incentives to conserve energy and would represent a large step*
168 *in rationalizing energy policy in the face of what could be one of the most challenging*
169 *decades for energy regulators, customers and suppliers since the 1970s. (Page 16, Lines 326-*
170 *332, emphasis added)*

171
172 In other words, if marginal cost pricing is to be applied at all, it is not just *new* loads that
173 should pay the marginal cost of generation, but *all* loads. This is consistent with the
174 principle that all loads—not just “new” ones—cause and should share in the cost of new
175 supplies.

176

177 **Q HOW DOES DR. MCDERMOTT RECONCILE THE IDEA THAT ALL CUSTOMERS SHOULD**
178 **PAY MARGINAL COST WITH THE COMPANY’S PROPOSAL THAT ONLY NEW LARGE**
179 **LOADS SHOULD PAY A HIGHER COST?**

180 **A** He says that his experience as a policy-making regulator suggests that customers “need
181 time to adjust to new policies” and “the institution of regulation needs time to adjust as
182 well” (Page 16, Lines 333-334). In the meantime, he feels that this issue can be
183 examined more thoroughly in a separate proceeding.

184

185 **Q IS THIS LOGICAL?**

186 A It is not. Load growth over the next two years is not so dramatic as to cause a
187 substantial increase in rates. Recall that according to RMP, the average projected
188 growth from large loads is about 1.3% a year over the next five years—less than half of
189 the total projected load growth. There is no need to create a precedent for
190 discriminatory rates at this time. Further, it is not clear what Dr. McDermott means by
191 customers and regulators needing “time to adjust.” Adjust to what? Nor has he
192 provided any justification for putting vintage pricing in place for some customers while
193 giving vintage pricing rates for other customers a more thorough examination in
194 another proceeding.

195

196 ***Analysis of the Proposal***

197 **Q PLEASE EXPLAIN YOUR COMMENT THAT PROPOSALS LIKE THIS HAVE BEEN MADE–**
198 **AND REJECTED–FOR OVER 30 YEARS.**

199 A One of the clearest and most forceful rejections of this idea was made by the New York
200 Public Service Commission when Professor Kahn was its chairman—the same Professor
201 Kahn whom Dr. McDermott quotes in support of marginal cost pricing. In 1976, Niagara
202 Mohawk Power Corporation (NMP) proposed that industrial customers should be
203 allocated more cost because it was their load growth that had contributed the most to

204 the need for new, higher-cost supply. The Commission described this idea as

205 “fallacious”:

206 *We single out for particular attention the argument advanced by NMP in favor of imposing*
207 *so disproportionate a part of the burden of the rate increase on industrial customers that it*
208 *was for those customers it planned the major additions to capacity, which now impose such*
209 *a grossly increased burden of revenue requirements, and that it is they, therefore, who*
210 *should properly be made to bear the burden of that excess capacity. **This reasoning is***
211 ***fallacious. So far as the costs of providing the generating and transmission facilities that***
212 ***serve all customers are concerned, no customer or group of customers taking power under***
213 ***the same conditions may be said to bear a greater marginal cost responsibility than***
214 ***others. The opposite notion is so widespread namely, that it is the customers whose***
215 ***demand is growing who bear the responsibility for the necessity for expanding capacity***
216 ***and higher current costs, and that it is they therefore who should be made to pay those***
217 ***higher costs that it is important to underline its inherent fallaciousness. Economic***
218 *efficiency requires that every purchaser weigh the desirability to himself of consuming a little*
219 *bit more, or the sacrifice to himself resulting from marginal reductions in purchases against*
220 *the corresponding marginal cost or savings to the system; only in this way will every*
221 *customer purchase the proper amount; that is, inefficiently subsidized consumption be*
222 *avoided. In brief, every customer should, to the extent it is feasible, be charged the marginal*
223 *cost. Or, to put it another way, **the customer who continues to consume at previous levels,***
224 ***while marginal costs are rising, is just as responsible for the system's having to add to its***
225 ***capacity at those rising incremental costs as the customer whose demand is increasing: a***
226 ***diminution in consumption by either would equally avoid the system's having to incur***
227 ***those costs. All consumption, by all customers should, ideally, be subjected to the test of***
228 ***marginal cost prices.** (re Niagara Mohawk Power Corporation, New York Public Service*
229 *Commission Opinion No. 76-23, 16 PUR4th 317, 335 (1976), emphasis added)*

230

231 In other words, the idea that “new loads cause the need for new supply” is simply

232 wrong. It is the *combined* loads of all customers, new and old, that create the need for

233 total supply. In fact, as I shall explain below, the distinction between “old” and “new”

234 loads is inherently arbitrary and is simply not sustainable in any logical fashion.

235 Mr. Griffith observes that RMP made a similar proposal in its recent Wyoming

236 case, although a stipulation in that rate case referred the matter to a collaborative

237 process.³ RMP (at that time, Utah Power & Light) made a similar proposal back in 1981.
238 In that case (Docket No. 9441 Sub 13), the utility proposed a new Schedule No. 17,
239 which the Wyoming Public Service Commission described thus:

240 *54. Utah Power seeks to amend the industrial Schedule No. 17 to require all large use*
241 *industrial customers (those whose demand exceeds one megawatt) to pay rates based upon*
242 *the ‘carrying’ costs of the investment in Hunter Unit No. 2 (in service in 1980) and in*
243 *associated ‘backbone’ transmission facilities, and in the parallel projected investment in*
244 *Hunter Unit Nos. 3 and 4. **These ‘vintaged’ rates are supported by Utah Power as being***
245 ***critical to place the extremely high cost of these generating facilities needed to serve the***
246 ***‘unprecedented’ Wyoming power growth, mainly on the large industrial customers***
247 ***experiencing such growth, and to avoid existing residential and other lower use customers’***
248 *rates from being substantially increased (over 130 per cent) to pay for or to subsidize the*
249 *industry growth. Under proposed amended Schedule Nos. 6, 8, 9, and 17, Utah Power would*
250 *grandfather, under lower cost rate schedules, certain customers and usage levels based*
251 *upon the time the load was served. (Re: Utah Power & Light Company, 46 PUR4th 204, 216,*
252 *emphasis added)*

253
254 At that time, Utah Power’s system-wide growth had been and was expected to continue
255 at a rate of about 7.5% annually. The Wyoming Commission rejected this proposal:

256 *Utah Power has not borne its burden of proof with evidence showing: that ‘vintage’ pricing*
257 *is just and reasonable and meets the W.S. 37-2-119 requirement that the proposed rates are*
258 *based upon existing facilities which are ‘used and useful’ for Wyoming service; and that the*
259 *proposal will not result in unfairly or unduly discriminatory and preferential rates between*
260 *classes and users within the industrial class, and between Wyoming users and similar users*
261 *in other states. This conclusion is reinforced by the substantial evidence of the Intervenor*
262 *showing **unfair and unjust discrimination and preferences arising out of the ‘vintage’***
263 ***pricing concept; and the evidence demonstrating that Utah Power’s current and projected***
264 *systemwide growth reasonably compares with that of prior years when Wyoming users*
265 *supported the far greater growth in the other states served by Utah Power. Utah Power’s*
266 *vintaging proposal is unsupported and should be denied. (46 PUR4th 204, 217, emphasis*
267 *added)*

268

³ See *In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Wyoming, Consisting of a General Rate Increase of Approximately \$36.1 Million Per Year, and For Approval of a New Renewable Resource Mechanism and Marginal Cost Pricing Tariff* in Docket No. 20000-277-ER-07.

269 Another case where the issue was argued at length and the regulator came to
270 the same conclusion was that of TransCanada PipeLines, before Canada's National
271 Energy Board. In that case, the pipeline increased its rate base by about 86% (from \$3.0
272 billion to \$5.6 billion), in response to requests from gas transportation shippers. The
273 self-described "existing shippers" argued that the higher cost of the new facilities should
274 be borne only by the "new shippers." The concept and the reasoning were essentially
275 the same as in the New York and Wyoming proceeding, with the same result:

276 *With regard to the debate as to who caused the need for the new facilities, the Board is*
277 *persuaded by the argument that it is the aggregate demand of all shippers that gives rise*
278 *to the need for additional pipeline capacity.* (TransCanada PipeLines GH-5-89 Reasons for
279 Decision, Volume I—Tolling and Economic Feasibility, National Energy Board, Page 13
280 (November, 1990), emphasis added)

281
282 In other words, it is incorrect to claim that "new loads" are the ones that cause "new
283 costs" and try to price service on that basis.

284

285 **Q DR. MCDERMOTT SAYS THAT THE NEED FOR SOME FORM OF MARGINAL COST**

286 **PRICING IS GREATER NOW THAN EVER BEFORE. IS THAT TRUE?**

287 **A** No. Utilities in the 1970s were facing large differentials between the cost of existing and
288 new supplies and were expecting high growth rates. In the 1970s, it was not uncommon
289 for utilities to project growth rates of 5%-7% per year.

290

291 Q YOU ALSO MENTIONED THAT THE UTAH COMMISSION HAS REJECTED THIS IDEA. IN
292 WHAT CASE?

293 A This was a case concerning the inter-jurisdictional allocation methodology for allocating
294 PacifiCorp's costs among the various states (Docket No. 97-035-04). In that proceeding,
295 the Commission said:

296 *We conclude that the basis of cost apportionment is cost causation reflecting the*
297 *characteristics of current rather than historical usage. This is the traditional meaning given*
298 *the cost-causation principle. In the 1990 Order, the Commission affirmed that principle by*
299 *rejecting a proposal to partition plant on a historical basis. Nothing in this record causes us*
300 *to change this decision. In addition, we agree with the reasons the Division enumerated in*
301 *this Docket to support that position: (1) Current use of existing plant is cost causative since*
302 *current loads require facilities to continue to operate; (2) PacifiCorp serves an aggregate*
303 *load and resources are not devoted to the exclusive use of a particular customer group; (3)*
304 *cost causation is dynamic not static in that it reflects current relative use of shared plant; (4)*
305 *divisional assignment of shared plant violates the principle of direct assignment which*
306 *requires exclusive not shared use; and (5) the FERC requires it for wholesale and transmission*
307 *transactions. An historical-use-based cost apportionment method results in a form of*
308 *vintage pricing. Vintage pricing has not been accepted in this jurisdiction, and the Division*
309 *asserts it can result in absurd outcomes. (In the Matter of a Proceeding to Establish An*
310 *Allocation Methodology to Separate PacifiCorp's Assets, Expenses and Revenues Between*
311 *Various States, Public Service Commission of Utah Docket No. 97-035-04, April 19, 1998,*
312 *emphasis added)*

313
314 The Utah Public Service Commission's prior rejection of vintage pricing concepts stands
315 in contrast to RMP's proposal here. If the cost of new supply were to be allocated (or
316 assigned) primarily to growing loads within Utah, customers (or regulators) in other
317 states could argue that such costs should be treated the same way in the inter-
318 jurisdictional allocation, thus subverting the Commission's prior decision.

319

320 Q PLEASE SUMMARIZE THE PROBLEMS WITH VINTAGE PRICING PROPOSALS, SUCH AS
321 THAT PROPOSED BY ROCKY MOUNTAIN POWER.

322 A Some of the problems are:

- 323 • Discrimination;
- 324 • Arbitrariness;
- 325 • Inconsistency;
- 326 • Inefficiency;
- 327 • Uncertainty; and
- 328 • Impact on economic development.

329 **Discrimination** results when similar customers (or loads) are charged different rates.

330 RMP's proposal is discriminatory in two respects. First, an "old" 10 MW customer would
331 pay a lower rate than a "new" 10 MW customer, even though the conditions of service
332 might be identical. Second, not all "new" load is treated the same. Two "new" loads of
333 6 MW each would pay less than a single "new" load of 10 MW. Growth by Residential
334 and General Service customers is ignored. RMP thus does not even consistently apply
335 its avowed principle that "new load causes new supply costs."

336 **Arbitrariness** is inherent in RMP's proposal because there is no logical or
337 consistent way to distinguish between "old" and "new" usage (which is why I put those
338 terms in quotation marks). Decisions must be made regularly, in real-time, regarding
339 how much electricity to use. A customer who continues to use incandescent lights
340 when compact fluorescents would be more efficient is clearly contributing to the need

341 for growth. A customer who chooses an electric oven over a gas oven when remodeling
342 (or when replacing an industrial drying oven) contributes to growth. All these small
343 decisions add up to a significant amount of electricity usage that is created by choices
344 made every day by “old” customers.

345 Even the distinction between “old” and “new” customers is unclear. For
346 example, if Martha Butcher moves from a smaller house to a new, larger house in RMP
347 territory, is she an “old” or “new” customer at the new location? Meanwhile, if Henry
348 Baker moves into Martha’s old house from another state, he is a “new” customer, but at
349 an “old” location. RMP’s proposal doesn’t solve these issues, it ignores them. These
350 illustrate the principle, mentioned above, that is the combined loads of *all* customers
351 that create the need for new supply.

352 **Inconsistency** means that the attempted association of new supply with the
353 users that “caused” the need is likely to be ignored when an existing source of supply
354 must be replaced. If a “new” customer is charged with the cost of a “new” source of
355 supply, then it logically follows that when an existing generating plant is
356 decommissioned (or a supply contract must be renewed at a higher rate), only “old”
357 customers should pay the higher costs. Further, what might happen in the future if new
358 supply costs are lower than embedded cost? Would customers with growing loads then
359 receive rates lower than the average embedded cost? (Lest this seem unrealistic, that is
360 exactly what happened 10-15 years ago in some states.)

361 **Inefficiency** results from the fact that trying to set some rates closer to marginal
362 cost necessarily results in setting other rates further from marginal cost. This is the
363 result of having an embedded cost revenue requirement. This is sometimes called
364 “piecemeal efficiency,” or more accurately, simply inefficiency.

365 **Uncertainty** results from the lack of clear logic underlying such a proposal. The
366 25% and 30% surcharges are not based on any specific analysis. What would prevent
367 RMP from raising the percentage surcharges in the future? Similarly, the 10 MW
368 threshold could be changed (in Wyoming, RMP proposed 5 MW). The most
369 fundamental uncertainty is that RMP has proposed a basic policy change from uniform
370 (non-discriminatory) pricing to vintage pricing.

371 **The impact on economic development** is unclear. More to the point, Rocky
372 Mountain Power’s goal is unclear. Is the goal to reduce the amount of large load
373 additions in Utah? Or does RMP expect the same load growth to materialize, but simply
374 extract more money from those customers? What will happen if some of that economic
375 development simply moves to an adjoining state?

376

377 **Summary**

378 **Q PLEASE SUMMARIZE YOUR TESTIMONY.**

379 A Rocky Mountain Power has characterized its proposed Rate 500 as an implementation
380 of “marginal cost pricing.” In fact, it is simply a version of vintage pricing. As such, it is

381 unreasonably discriminatory in that customers with similar service characteristics would
382 pay different rates simply based on their date of attachment to the system. Moreover,
383 the treatment of growth is inconsistent, in that different rates would apply to the load
384 growth of some customers than to that of other customers. Neither of these
385 discriminatory aspects is consistent with the economic theory that Dr. McDermott has
386 presented. In principle, “marginal cost pricing” means that all customers, new and old,
387 should face the same marginal costs, as determined by their service characteristics
388 (voltage level, time of day, and so on). This Commission, like others, has previously
389 unequivocally rejected vintage pricing concepts similar to those proposed here.

390 I recommend that Rate 500—and the underlying rationale—be rejected.

391

392 **Q DOES THAT CONCLUDE YOUR TESTIMONY AT THIS TIME?**

393 **A** Yes, it does.