

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.

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)  
) DOCKET NO. 11-035-200  
) Exhibit DPU 3.0 Dir-Rev Req  
)  
)  
) Testimony and Exhibits  
) Richard S. Hahn  
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FOR THE DIVISION OF PUBLIC UTILITIES  
DEPARTMENT OF COMMERCE  
STATE OF UTAH

REDACTED

Testimony of  
Richard S. Hahn

June 11, 2012

UTAH PUBLIC SERVICE COMMISSION  
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## ATTACHMENTS

DPU Exhibit 3.1 Dir-Rev Req, Resume of Richard S. Hahn

DPU Exhibit 3.2 Dir-Rev Req, City Creek Expenditure Requisition (“ER”)

DPU Exhibit 3.3 Dir-Rev Req, City Creek Authorization Request (“APR”)

DPU Exhibit 3.4 Dir-Rev Req, City Creek Investment Appraisal (“IAD”)

DPU Exhibit 3.5 Dir-Rev Req, City Creek Project Change Notice (“PCN”)

DPU Exhibit 3.6 Dir-Rev Req, Listing of Generic Projects Analyzed

DPU Exhibit 3.7 Dir-Rev Req, Listing of Specific Projects Analyzed



1 **I. Introduction**

2

3 **Q: Please state your name, business address and title.**

4 A: My name is Richard S. Hahn. I am employed by La Capra Associates, Inc. (“La Capra  
5 Associates”) as a Principal Consultant. My business address is One Washington Mall,  
6 Boston, Massachusetts, 02108.

7

8 **Q: On whose behalf are you testifying?**

9 A: The Division of Public Utilities of the State of Utah (the “Division”).

10

11 **Q: Please summarize your educational and professional experience.**

12 A: I received my Bachelor’s in Science, Electrical Engineering, in 1973, and my Masters in  
13 Science, Electrical Engineering, in 1974, both from Northeastern University. I received  
14 my Masters in Business Administration from Boston College in 1982. Since joining La  
15 Capra in 2004, I have worked on many projects related to energy markets, utility resource  
16 planning projects, forecasts of wholesale market prices, and asset valuations. Prior to  
17 joining La Capra, I was employed by NSTAR Electric & Gas (formerly Boston Edison  
18 Company) from 1973 to 2003, where I was responsible for, among other activities,  
19 integrated resource planning and procurement of power supplies via Requests For  
20 Proposals (“RFPs”) and bilateral contract negotiations. Throughout my career, I have  
21 gained and demonstrated considerable experience and expertise in utility planning  
22 activities. I am a registered professional electrical engineer in the Commonwealth of  
23 Massachusetts. My resume is provided in DPU Exhibit 3.1 Dir-Rev Req.

24

25 **Q: What is the purpose of your testimony?**

26 A: La Capra Associates was retained by the Division to assist in reviewing the Application  
27 of Rocky Mountain Power (“RMP” or the “Company”) seeking approval from the Public  
28 Service Commission of Utah (“Commission”) to increase electric rates. The scope of our  
29 assignment was to review the proposed additions to plant in-service. This direct  
30 testimony presents the results of and the conclusions from that review.

31

32 **Q: Have you previously testified before the Public Service Commission of Utah?**

33 A: Yes. I testified in Docket No. 10-035-126 regarding the Application of Rocky Mountain  
34 Power for Approval of a Significant Energy Resource Decision Resulting from the All  
35 Source Request for Proposals. And I testified in Docket No. 10-035-124 regarding the  
36 Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility  
37 Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and  
38 Electric Service Regulations.

39

40 **II. Executive Summary of Testimony**

41

42 **Q: Can you summarize the results and conclusions of your review of the Application in**  
43 **this proceeding?**

44 A: The results and conclusions of my review can be summarized as follows.

- 45
  - I find that the Company’s written capital planning and governance processes
- 46 themselves are reasonable.



- 47           • The Company has not always followed its capital planning process for many  
48           proposed capital project. In some cases, adequate documentation has not been  
49           provided or the Company has acknowledged that such documentation does not yet  
50           exist.
- 51           • The need for some of the examined capital projects no longer exists.
- 52           • Some proposed projects have in-service dates that are different than the in-service  
53           dates included in the Company's projected plant additions.
- 54           • The Company projects plant additions from July 2011 through May 2013 to be  
55           \$2,617 million. The test year plant in-service is based upon the thirteen-month  
56           average from May 2012 through May 2013. From July 2011 through April 2012,  
57           projected plant additions are approximately \$973 million, and \$1,644 million is  
58           projected to be added from May 2012 through May 2013.<sup>1</sup>
- 59           • Based upon my review of the original filing, I find that several adjustments to the  
60           Company's proposed capital spending from July 2011 to May 2013 should be made.  
61           Specifically, I recommend that the \$2,617 million in capital spending proposed by the  
62           Company be reduced by \$127.6 million. Utah's share of this reduction is about \$66  
63           million. Figure 1 below summarizes the adjustments to the Company's proposed  
64           capital spending for the July 2011 to May 2013 period.
- 65           • Division Staff has estimated that the effect of reducing projected plant additions by  
66           the above amount is to reduce the revenue requirement by \$6.7 million. This change  
67           is described further in the testimony of Matthew Croft on behalf of the Division.

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<sup>1</sup> A portion of total Company plant additions will be allocated to Utah customers, as described later in this testimony. Unless specifically noted as Utah's share, the costs discussed in this testimony are total Company costs.

Figure 1

La Capra Associates Proposed Adjustments to Requested Plant Additions (\$000)		Plant/Type	Factor	RMP Proposed Total 6/2011 to 5/2013	LCA 28-month total	Proposed Change	Utah Allocator	Utah Proposed Change	Comments
Generic	Upgrades and Enhancements	Intangible	SO	\$17,638	\$4,114	\$13,523	42.85%	\$5,795	actual-trend well below projected; no specific basis offered
Generic	Corp Optimization	Intangible	SO	\$4,388	\$926	\$3,461	42.85%	\$1,483	actual-trend well below projected; no specific basis offered
Generic	Total Obsolescence Management	General	SO	\$21,191	\$13,765	\$7,426	42.85%	\$3,182	actual-trend well below projected; no specific basis offered
Generic	U4--Functional Upgrade - Spare Equipment Addition	Distribution	UT	\$3,963	\$118	\$3,845	100.00%	\$3,845	actual-trend well below projected; no specific basis offered
Generic	R2--Replace - Substation - Meters and Relays	Transmission	SG	\$1,410	\$331	\$1,079	43.15%	\$466	actual-trend well below projected; no specific basis offered
Generic	R1--Replace - Storm and Casualty	Transmission	SG	\$1,055	\$398	\$657	43.15%	\$284	actual-trend well below projected; no specific basis offered
Generic	RE--Replace - Overhead Transmission Lines - Poles	Transmission	SG	\$2,656	\$1,787	\$869	43.15%	\$375	actual-trend well below projected; no specific basis offered
Generic	MR--Mandated - Regional or National Regulatory	Transmission	SG	\$2,082	\$409	\$1,672	43.15%	\$722	actual-trend well below projected; inadequate basis offered
Generic	MR--Mandated - Regional or National Regulatory	Transmission	SG	\$1,497	\$124	\$1,373	43.15%	\$592	actual-trend well below projected; inadequate basis offered
Specific	W-1799 Replace three generators company wide	Other	SG	\$319	\$0	\$319	43.15%	\$138	No Documentation
Specific	Naughton U3 OH Coal Combustible Dust CY 11	Steam	SG	\$262	\$0	\$262	43.15%	\$113	Naughton unit 3 to be converted to natural gas
Specific	Naughton U3 3-4 Coal Mill Rebuild CY11	Steam	SG	\$249	\$0	\$249	43.15%	\$108	Naughton unit 3 to be converted to natural gas
Specific	Naughton U3 3-1 Coal Mill Rebuild CY11	Steam	SG	\$211	\$0	\$211	43.15%	\$91	Naughton unit 3 to be converted to natural gas
Specific	Naughton U3 3-2 Coal Mill Rebuild CY12	Steam	SG	\$189	\$0	\$189	43.15%	\$82	Naughton unit 3 to be converted to natural gas
Specific	Naughton U3 3-4 Coal Mill Rebuild CY12	Steam	SG	\$189	\$0	\$189	43.15%	\$82	Naughton unit 3 to be converted to natural gas
Specific	Lake Side 2 Interconnect	Transmission	SG	\$19,233	\$0	\$19,233	43.15%	\$8,300	Naughton unit 3 to be converted to natural gas
Specific	Terminal Substation	Transmission	SG	\$42,107	\$15,600	\$26,508	43.15%	\$11,439	Generator interconnection for unit in-service after test year ends
Specific	City Creek Center: New 40 MW Development for PRI Phase II	Distribution	UT	\$17,775	\$3,675	\$14,100	100.00%	\$14,100	Increased cost estimate not justified, new in-service date is 12/2012
Specific	Skypark Build New 138-12 SKV Substation	Distribution	UT	\$8,064	\$6,109	\$1,955	100.00%	\$1,955	Adjust CIAC to be consistent with Company policy
Specific	Cottonwood Prep Plant-System Improvement	Mining	SE	\$4,039	\$0	\$4,039	42.95%	\$1,735	\$1.2M land not used; \$0.8M expense double-counted
Specific	Energy West Deer Creek Mine CAP Forecast	Mining	SE	\$8,653	\$3,277	\$5,376	42.95%	\$2,309	Documentation provided shows July 2013 in-service date
Specific	Scipio Pass - Mineral Mountain Microwave	General	SG	\$2,780	\$1,480	\$1,300	43.15%	\$561	Documentation provided shows \$3,277,000
Specific	2GHz Microwave Replacement: Pavant Sub to Delta Service Center	General	UT	\$350	\$134	\$216	100.00%	\$216	Documentation provided shows only \$1,480,000 approved.
Specific	JB U2 Replace Cooling Tower 12/13	Steam	SG	\$7,110	\$0	\$7,110	43.15%	\$3,068	Documentation provided shows only \$134,000 approved.
Specific	Naughton UO BART Study for CAM	Steam	SG	\$214	\$0	\$214	43.15%	\$92	No Documentation; Unlikely to be completed by May 2013
Specific	Current Crk U2 CSA Variable fee 24k - CTB MI	Other	SG	\$8,726	\$0	\$8,726	43.15%	\$3,766	Limited outdated documentation; Calendar year 2007-2008 project
Specific	Cholla U4 FABRIC FILTER BAG REPLACE CY13	Steam	SGCH	\$572	\$0	\$372	41.89%	\$156	No Documentation; Speculative to pre-judge first major inspection
Specific	Hermiston UO Auxiliary Boiler	Other	SG	\$1,608	\$0	\$1,608	43.15%	\$694	No Documentation or project description
Specific	Naughton UO D10 Replacement	General	SG	\$1,340	\$0	\$1,340	43.15%	\$578	No Documentation provided.
Sum				\$179,858	\$52,248	\$127,610		\$66,408	
	Generic Project Subtotal		9	\$55,878	\$21,973	\$33,905		\$16,744	
	Specific Project Subtotal		21	\$123,980	\$30,275	\$93,705		\$49,664	
	Total Generic Project Reviewed		53	\$242,912					
	Total Specific Project Reviewed		53	\$258,167					

70 **III. Overview of Projected Plant In-Service**

71

72 **Q: Can you summarize the Company's proposed additions to plant in-service?**

73 A: In this rate case, the Company proposes to use the average plant in-service balance for  
74 thirteen months from May 2012 to May 2013. At the time the filing was prepared, it is  
75 my understanding that the Company had actual plant in-service data as of June 30, 2011.  
76 The Company projected net plant additions by month over the 23 month period from July  
77 2011 through May 2013. Plant additions were projected by compiling estimates of  
78 proposed capital spending on various projects. A project with a specific in-service date  
79 was added to the plant in-service database in the month that the project was expected to  
80 be in-service. For projects without any specific in-service date, spending was spread  
81 across the 23 months using historical distributions. Monthly retirements were estimated  
82 using statistical analysis. Net plant in-service at the end of any given month equals the  
83 beginning balance plus plant additions less plant retirements.

84

85 The Company projects to invest \$2,617 million in new capital projects between June  
86 2011 and May 2013. There are 1,206 individually identified projects that sum to this  
87 total. Figure 2 below provides a summary of the Company's proposed additions during  
88 this 23 month period. The data in Figure 2 is broken down by plant category, project  
89 type (either "generic" or "specific"), and by spending level. A specific project is  
90 typically a large discrete investment to address a particular, identified need. For example,  
91 if load growth causes transformers at a particular substation to be overloaded, the  
92 Company will replace those transformers with ones of higher capacity. A generic project

93 is one where many small capital spending items may be aggregated into one cost  
94 category, such as storm costs. There is typically no single in-service date for these  
95 generic projects.

96 Figure 2

11-035-2000 SUMMARY OF PROJECTED CAPITAL EXPENDITURES June 2011 to May 2013										
Sum of Costs		Generic				Specific				Grand Total
Account	Category	>\$5M	\$5M to \$1M	<\$1M	Total	>\$5M	\$5M to \$1M	<\$1M	Total	
312	Steam Plant					603,970,717	139,268,552	126,836,909	870,076,178	870,076,178
355	Transmission Plant	17,028,694	46,062,416	25,717,555	88,808,665	614,987,107	66,751,670	7,620,650	689,359,426	778,168,091
364	Distribution Plant	136,433,771	113,680,945	42,091,220	292,205,936	58,765,006	40,726,691	2,038,742	101,530,439	393,736,374
332	Hydro Plant					240,947,976	38,508,012	19,769,873	299,225,862	299,225,862
397	General Plant	45,400,703	33,247,879	9,694,732	88,343,314	55,578,380	18,345,073	7,812,874	81,736,326	170,079,640
343	Other Plant					17,452,951	9,718,542	18,885,604	46,057,097	46,057,097
303	Intangible Plant	17,637,637	4,387,531	1,816,226	23,841,394		1,870,940		1,870,940	25,712,334
302	Intangible Plant						4,165,419	5,996,730	10,162,148	10,162,148
399	Mining Plant					8,652,600	9,076,571	6,854,347	24,583,519	24,583,519
Grand Total		216,500,805	197,378,771	79,319,732	493,199,308	1,600,354,736	328,431,469	195,815,730	2,124,601,934	2,617,801,242

Count of Line Items										
		Generic				Specific				Grand Total
Account	Category	>\$5M	\$5M to \$1M	<\$1M	Total	>\$5M	\$5M to \$1M	<\$1M	Total	
312	Steam Plant					17	70	386	473	473
355	Transmission Plant	2	25	96	123	15	26	21	62	185
364	Distribution Plant	12	50	144	206	7	15	6	28	234
332	Hydro Plant					9	19	57	85	85
397	General Plant	3	14	57	74	4	8	21	33	107
343	Other Plant					2	5	62	69	69
303	Intangible Plant	1	1	4	6		1		1	7
302	Intangible Plant						1	25	26	26
399	Mining Plant					1	4	15	20	20
Grand Total		18	90	301	409	55	149	593	797	1,206

97  
98

99 IV. Historical Summary of Capital Spending / Plant Additions

100

101 Q: How does the Company's projected capital spending for the purposes of this rate  
102 case compare to recent actual spending?

103 A: The projected \$2,617 million over 23 month equates to annual spending of about \$1,365  
104 million. Since being acquired by Mid-American Energy in early 2006, the Company has  
105 invested on average \$1,667 million per year in new plant, with \$1,352 million added in  
106 2011. Figure 3 below provides this historic data based on the Company's annual FERC  
107 Form 1 reports.

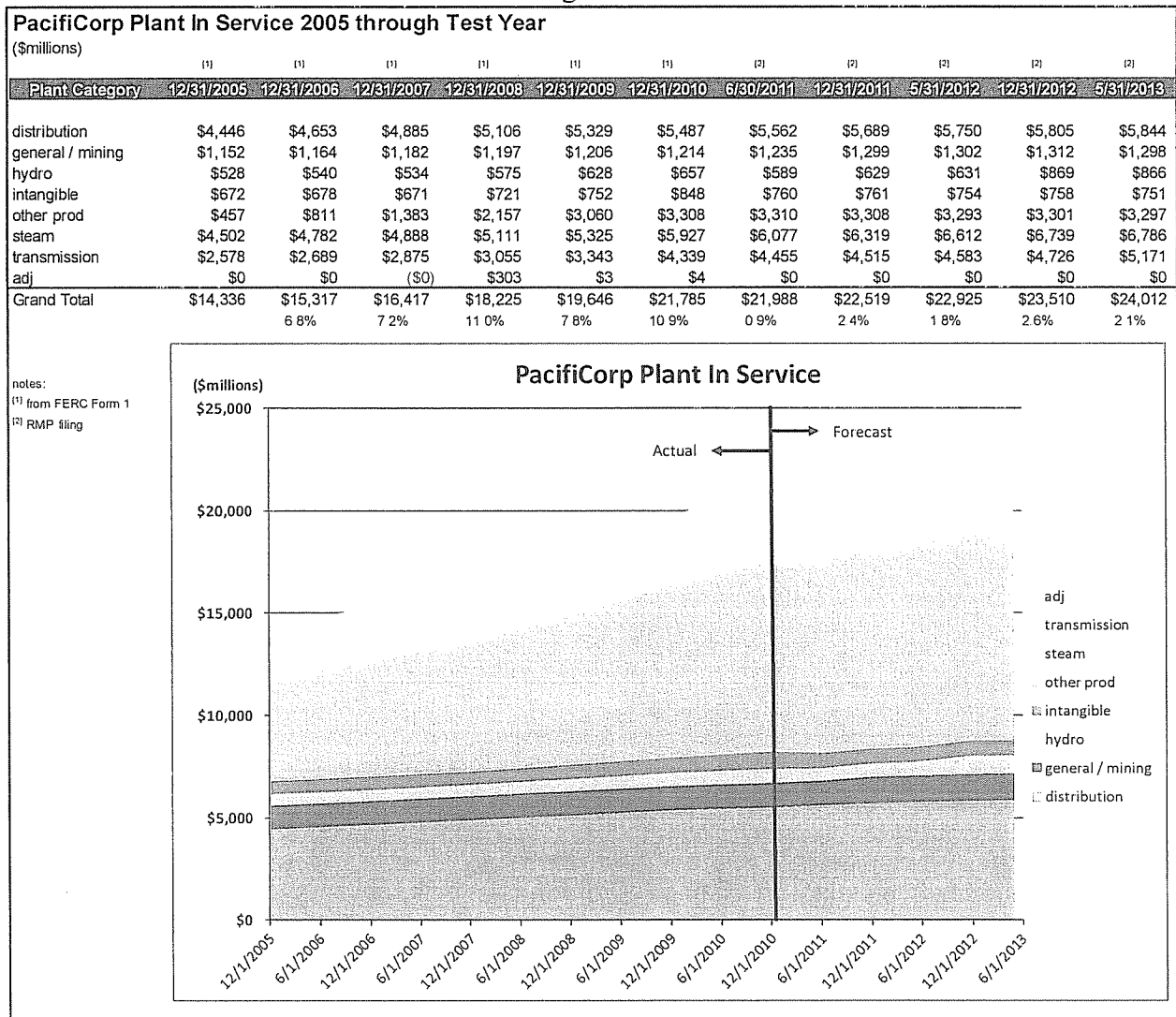
108 Figure 3

<b>PacifiCorp Plant Additions 2005 through Test Year</b>							
(\$millions)							
<b>Plant Category</b>	<b>12/31/2005</b>	<b>12/31/2006</b>	<b>12/31/2007</b>	<b>12/31/2008</b>	<b>12/31/2009</b>	<b>12/31/2010</b>	<b>12/31/2011</b>
distribution	\$228	\$239	\$283	\$282	\$257	\$222	\$243
general	\$94	\$81	\$72	\$75	\$76	\$89	\$131
hydro	\$20	\$15	\$19	\$43	\$57	\$32	\$80
intangible	\$72	\$34	\$18	\$81	\$33	\$101	\$51
other prod	\$187	\$360	\$586	\$780	\$588	\$252	\$27
steam	\$136	\$322	\$186	\$331	\$273	\$687	\$614
transmission	\$92	\$121	\$184	\$217	\$291	\$1,030	\$204
adj	\$0	\$0	(\$0)	\$303	\$3	\$11	\$1
<b>Grand Total</b>	<b>\$830</b>	<b>\$1,173</b>	<b>\$1,346</b>	<b>\$2,111</b>	<b>\$1,578</b>	<b>\$2,425</b>	<b>\$1,352</b>

109  
110  
111 The Company projects retirements of about \$593 million from June 2011 through May  
112 2013, resulting in net plant added of \$2,617 million in new capital investments less \$593  
113 million in retirements, or \$2,024 million. Thus, plant in-service from June 2011 through  
114 May 2013 increases by \$2,024 million to \$24,012 million from \$21,988 million. Figure 4  
115 below shows plant in-service balances from 2005 through the test year projection in this  
116 case. From 2005 through 2010, plant in-service increased 52% from \$14,336 million to  
117 \$21,785 million, or 10% per year. Since then the growth in plant in-service has slowed to  
118 about 4% per year.

120

Figure 4



121  
122

123 **V. Summary of the Company's Capital Planning Process**

124

125 **Q: What is the Company's internal process for developing its plans for capital**  
126 **spending?**

127 **A: DPU Data Requests 2.15 and 2.16 asked the Company to provide copies of any**  
128 **accounting manuals and procedures or protocols for internal approval of capital projects.**

129 **In its responses the Company provided three documents: (1) a Capitalization Policy, (2)**

130 Corporate Governance and Approvals Process, and (3) 2010 to 2019 Budget and 10-Year  
131 Plan Guidelines. From a review of these documents, it appears that the Company's  
132 process is to have each of its business units identify the potential need for capital  
133 investments. For each such identified project, the business unit must request  
134 authorization to make the capital investment. An Appropriation Request ("APR") or an  
135 Expenditure Request ("ER") is the documentation that is required for approval to spend  
136 money on a capital project. A capital project is defined as an asset that is used in the  
137 Company's operations or provides benefit to the Company, and has an expected useful  
138 life of one year or greater. A capital project must also meet a specific definition of a  
139 capital asset with a defined property retirement unit ("PRU"). There does not appear to  
140 be a threshold limit for these forms. The Capitalization Policy states that "APR or ER  
141 authorization is required for any capital project expenditure".

142  
143 In addition to the APR / ER, many requests for approval to spend funds on capital  
144 projects are accompanied by an Investment Appraisal Document ("IAD"). An IAD  
145 includes a summary of the scope of the project, a discussion of the need, the alternatives  
146 considered, and the results of the Company's standard financial evaluation model.

147 Another document that is often prepared for a capital project is a Project Change Notice  
148 ("PCN"). A PCN appears to be created whenever there is a significant change in the  
149 project, such as an increase in the project cost or a change in the project schedule.

150  
151 **Q: Can you provide examples of these documents from the information provided by the**  
152 **Company?**

153 A: I have attached to my testimony exhibits that provide examples of the above  
154 documentation for capital projects.

- 155 • DPU Exhibit 3.2 Dir-Rev Req, City Creek Expenditure Requisition (“ER”)
- 156 • DPU Exhibit 3.3 Dir-Rev Req, City Creek Appropriation Request (“APR”)
- 157 • DPU Exhibit 3.4 Dir-Rev Req, City Creek Investment Appraisal (“IAD”)
- 158 • DPU Exhibit 3.5 Dir-Rev Req, City Creek Project Change Notice (“PCN”)
- 159

160 **Q: What information is provided in the documentation entitled Corporate Governance**  
161 **and Approvals Process?**

162 A: This documentation describes how the authority to approve capital projects is delegated  
163 to various levels of management. For example, the President of Rocky Mountain Power  
164 can approve capital projects with estimated costs up to \$25 million. For projects greater  
165 than \$25 million, approval from the PacifiCorp CEO is required. The governance  
166 process document also establishes organizational limits on who can approve certain types  
167 of projects. For example, all hydro relicensing projects require the approval of the  
168 PacifiCorp CEO, regardless of cost. Information technology projects must be approved  
169 by the PacifiCorp IT organization. This delegation of authority is intended to assure that  
170 large projects are reviewed at the appropriate levels of management and that proper  
171 controls are in place to plan for and monitor capital spending.

172

173 **Q: Are these the only documentation that you would expect to be available for capital**  
174 **projects?**

175 A: No. These documents are only for gaining corporate authorization to spend the funds.  
176 They represent the paperwork for the financial operations of the Company, including  
177 regulatory cost recovery. I would expect that there would be other documentation for



178 most capital projects, such as engineering and other technical studies. These technical  
179 studies would describe more fully the need for the project including the timing, the  
180 alternatives considered, the basis for the cost of each alternative, the technical and  
181 economic evaluation of the alternatives, and a discussion of how the preferred or  
182 recommended project was chosen. It would be my expectation that such documentation  
183 would be prepared prior to the development of APRs, ERs, and IADs, and that such  
184 documentation would be reviewed prior to approval of the APR / ER.

185

186 **Q: Does the Company's process include monitoring and post-completion assessments?**

187 A: Yes. The governance process states that Post Investment Reviews ("PIRs") are required  
188 for a certain percentage of completed capital projects. A PIR is an after-the-fact analysis  
189 that evaluates business control of the project and any lessons learned. They are required  
190 for 30% of projects greater than \$10 million, 5% of projects between \$1 million and \$10  
191 million, and 2% of projects between \$250,000 and \$1 million. An Interim Project  
192 Appraisal ("IPA") may be performed for projects with a duration greater than 1 year.

193

194 **Q: What is your assessment of the Company's capital planning process?**

195 A: The approval and governance processes described above are similar to what I have seen  
196 at other utilities. The implementation of this process and the compilation of all  
197 appropriate documentation, including the technical analyses and supporting studies, are  
198 the keys to a defensible plan. APRs / ERs / IADs / PCNs should be available for all  
199 capital projects. These are the key documents as they represent an approved level of  
200 capital spending. It is possible that certain projects may be included in the 10-year

201 Capital Plan that do not yet have approval or authorization. Thus, the fact that a project  
202 is included in a capital budget is not sufficient to justify inclusion in a forecast of plant  
203 in-service for a forward looking test year. The up-to-date APRs, ERs, IADs, and PCNs  
204 should provide the latest basis upon which to base a forecast of plant in-service.

205

206 **VI. Categories of Capital Projects**

207

208 **Q: Earlier in this testimony, you discussed generic and specific projects. Can you**  
209 **explain further how you chose these two categories and how the Company's capital**  
210 **database was disaggregated into these categories?**

211 **A:** In response to DPU Data Request 2.1, details were provided on 1,206 individual capital  
212 projects. As shown in Figure 2 above, I have classified 409 of these projects as generic.  
213 By that, I mean that these projects do not have a specific in-service date and they are not  
214 associated with specific pieces of equipment or investments. These projects are for  
215 capital investments in broad categories. For example, the Company has included capital  
216 expenditures for a project named "Replace - Storm and Casualty". The Company does  
217 not project exactly when storms will occur, nor what specific facilities will be replaced.  
218 However, from experience, it knows that it typically spends capital dollars on storm  
219 restoration each year. Projects such as this are treated differently from specific projects,  
220 where a specific expected need exists and the facilities to be installed and the installation  
221 schedule can be predicted. Generic projects are not assigned an APR number. So, the  
222 409 projects listed in the capital database that did not have an assigned APR and had

223 various in-service dates were deemed to be generic projects. A review of the titles of  
224 these projects confirmed that designation.

225

## 226 VII. Selection of Generic Projects

227

228 **Q: How many of the 409 generic capital projects shown in Figure 2 did you examine in**  
229 **further detail?**

230 A: It would not be practical to examine all 409 projects in detail. I did not review any  
231 generic projects with total projected expenditures less than one million dollars.  
232 Furthermore, many generic projects are directly assigned to other states besides Utah.  
233 Since customers of RMP would not have to pay for any of these projects that are directly  
234 assigned or allocated to other states, I did not review them. I reviewed all 53 generic  
235 projects greater than one million dollars that were directly assigned to Utah or shared  
236 across the PacifiCorp system.

237

238 Of the 53 projects reviewed, 27 projects were associated with transmission plant, 18 were  
239 associated with distribution plant, six were associated with general plant, and two were  
240 associated with intangible plant. Figure 5 below provides a summary of the generic  
241 projects analyzed. The total cost of the 53 projects reviewed is about \$243 million, or  
242 roughly half the \$493 million total for all generic projects in the Company's Capital  
243 Database. DPU Exhibit 3.6 Dir-Rev Req provides a listing of the individual generic  
244 capital projects analyzed.

245

246

Figure 5

<b>GENERIC PROJECTS ANALYZED</b>		
<b>Plant Type</b>	<b>count</b>	<b>Projected Plant Additions (\$000)</b>
Transmission	27	\$63,091
Distribution	18	\$111,377
General	6	\$46,419
Intangible	2	\$22,025
<b>Total</b>	<b>53</b>	<b>\$242,912</b>

247  
248

249 **VIII. Analysis of Generic Projects**

250

251 **Q: Please explain how you analyzed the projected capital spending for generic capital**  
252 **projects.**

253 **A:** Because generic capital projects are by their nature not tied to a specific need or a single  
254 asset or investment, it was necessary to analyze spending trends and combine that  
255 analysis with any additional explanation provided by the Company in responses to data  
256 requests. The Company has stated that it also examines recent spending trends in  
257 establishing its projected plant additions for generic projects.<sup>2</sup> I will illustrate the  
258 analysis of projected capital spending for the generic project named “Total Obsolescence  
259 Management”.

260

261 **Q: Can you describe how you analyzed projected capital spending for the project**  
262 **named Total Obsolescence Management?**

---

<sup>2</sup> See responses to DPU Data Requests 19.1(c), 19.2(b), 19.5(d), 19.6(c).

263 A: In the category of general plant, the Company has projected that the capital additions for  
264 the Total Obsolescence Management project will be \$21.2 million between June 2011  
265 and May 2013. In the response to DPU Data Request 19.5, the Company provided the  
266 following explanation of this project.

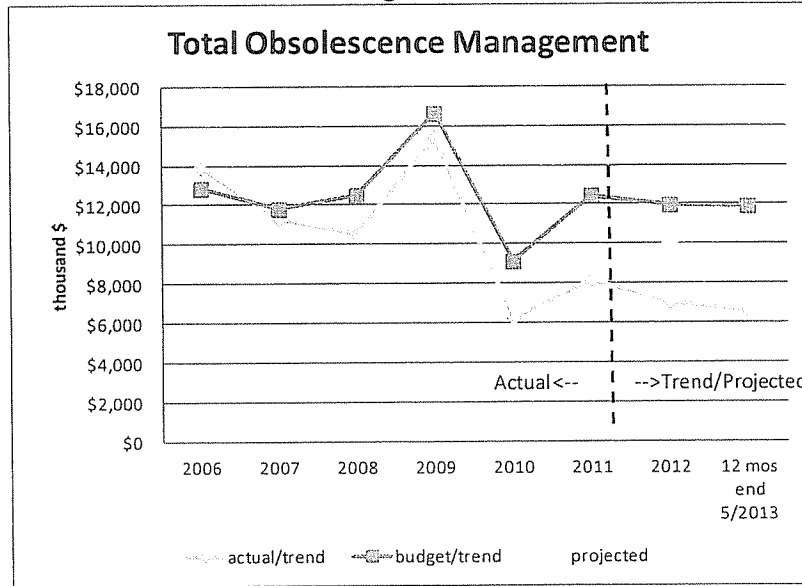
267 *Technology Obsolescence Management is a strategy of planned replacement of*  
268 *data and voice infrastructure hardware and software components based on*  
269 *evaluation of company needs and expected obsolescence according to key*  
270 *vendors' and service providers' end of life policies, limited by the Company's*  
271 *planned capital expenditures. This strategy is designed to assure the*  
272 *infrastructure continues to serve the business needs at the lowest overall costs.*  
273 *Expenditures associated with these activities are typically numerous but may*  
274 *individually be relatively small in magnitude. Expenditures are budgeted by*  
275 *evaluating historical trends, age of assets currently in-service and other known*  
276 *facts or anticipated business need. Planned annual expenditures are apportioned*  
277 *to months based on historical monthly spending patterns and other known facts.*  
278 *Please refer to Attachment 19.5b for a copy of the Technology Obsolescence*  
279 *Management description.*  
280

281 **Q: How did you analyze the projected spending request for this project to be included**  
282 **in rate base?**

283 A: Since the Company stated that it established capital budgets for this project based upon,  
284 among other considerations, historical spending, I examined annual historical actual and  
285 budgeted amounts for this project from 2006 to 2011. In the response to DPU Data  
286 Request 19.5, the Company provided such data. My analysis of this data is summarized  
287 in Figure 6 below.

288

Figure 6



289  
290

291 Data provided by the Company is shown for both actual spending and budgeted amounts  
292 through 2011. For both actual and budgeted spending, historical data was used to  
293 develop trends which were used to project annual spending for two 12-month periods:  
294 calendar year 2012 and the twelve months ending May 31, 2013.<sup>3</sup> The Company's  
295 projected capital expenditures for both of these 12-month periods are also shown. From  
296 the data in Figure 6 above, I conclude that the Company has consistently spent less than  
297 the amount budgeted for this cost category. Its projected test year spending is  
298 considerably higher than recent actual spending or projected spending based upon trends.  
299 The Company's projected spending is 35% higher than the trend. Therefore, I reduced  
300 the Company's projected capital additions for the 23-month period (June 2011 to May  
301 2013) by 35%, from \$21.2 million to \$13.8 million. The recommended reduction for this  
302 project is \$7.4 million. Figure 7 below shows the calculation of this adjustment.  
303

<sup>3</sup> The TREND function in Excel was used to develop these trends.

304  
 305

Figure 7  
 Analysis of Capital Spending for Total Obsolescence Management

RMP proposed total 6/2011 to 5/2013	type	2006	2007	2008	2009	2010	2011	2012	12 mos end 5/2013	adjust ment	LCA 23 month total
\$21,191	actual/trend	\$13,873	\$11,261	\$10,514	\$15,407	\$6,247	\$8,180	\$7,052	\$6,593	35.0%	\$13,765
	budget/trend	\$12,819	\$11,779	\$12,472	\$16,612	\$9,095	\$12,413	\$11,937	\$11,866		
	projected							\$10,395	\$10,611		

306  
 307

308 **Q: Has the Company provided any additional detail that would cause you to revise the**  
 309 **estimate developed above?**

310 A: No. In response to a data request for explanation of the project and how the projected  
 311 capital expenditures were calculated, the Company provided DPU Data Request 19.5  
 312 Attachment 19.5(b). The information provided in attachment 19.5(b) is a very general  
 313 overview of Technology Obsolescence Management Strategy but it does not provide any  
 314 additional details that would be useful in determining the appropriate amount of capital  
 315 spending to be included in a future test year.

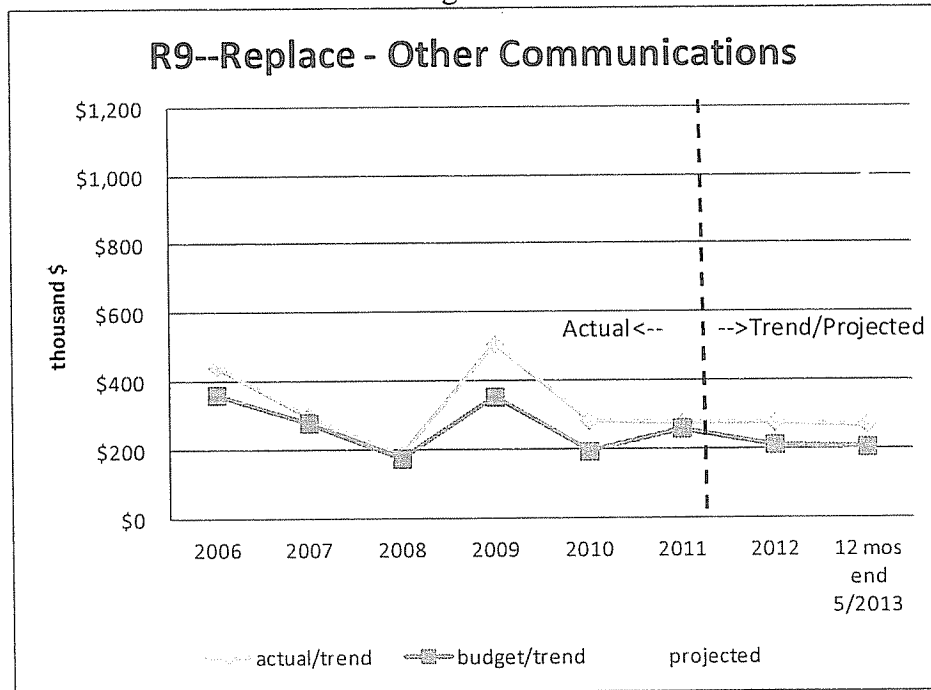
316

317 **Q. Do you recommend reducing the budgeted capital additions for all generic projects**  
 318 **that are projected to be higher than their historical trends?**

319 A: No. Through discovery, the Company was provided the opportunity to explain any  
 320 variance between their projected expenditures and historic spending trend. In several  
 321 cases, I found their explanations sufficient. Only where adequate documentation was  
 322 provided did I recommend the full budgeted amount. For instance, Figure 8 below shows  
 323 my trend analysis of a different generic general plant project, "R9 – Replace – Other  
 324 Communications". Similar to the "Total Obsolescence Management" project shown

325 above, the projected expenditures for this project are well above historic trend levels. In  
326 this case, however, the work papers provided in response to DPU Data Request 19.5(d)  
327 showed sufficient basis for projecting these higher levels of spending. As a result, I  
328 recommend that the full budgeted amount for this project be included in the test year.

329 Figure 8



330  
331

332 **Q: Was the process described above used to examine the projected capital spending for**  
333 **other generic projects?**

334 **A:** Yes. The information provided in Figures 5, 6 and 7 and the analysis described above  
335 were developed for all 53 generic projects I examined. This information is provided in an  
336 excel spreadsheet file named "Hahn Workpapers for Generic Projects.xlsx", which  
337 accompanies this testimony.

338



339 IX. Selection of Specific Projects Reviewed

340

341 Q: Please describe the scope of your review of the “specific” projects?

342 A: Of the \$2.6 billion in capital expenditures forecast by the Company from June 2011 to  
 343 May 2013, more than \$2.1 billion is budgeted for 797 specific projects. In contrast to  
 344 “generic” projects, these line items contain projected expenditures for discrete projects  
 345 that will be completed and placed in-service on a specific date by May 2013. It was  
 346 beyond the scope of my assignment to examine each and every specific project included  
 347 in the Company’s projection. Instead, I selected a sample of 45 projects to review in  
 348 some detail. Figure 9 below provides a summary of the specific projects analyzed. DPU  
 349 Exhibit 3.7 Dir-Rev Req provides the full list of the specific projects that I reviewed.

350

351

Figure 9

<b>SPECIFIC PROJECTS ANALYZED</b>			
Account	Plant Type	count	Projected Plant Additions (\$000)
302	Intangible	1	\$141
303	Intangible	1	\$1,871
312	Steam Production	10	\$52,338
332	Hydro Production	5	\$23,768
343	Other Production	3	\$10,653
355	Transmission	8	\$87,767
360-373	Distribution	7	\$42,815
397	General	4	\$20,650
399	Mining	6	\$18,165
Grand Total		45	\$258,167

352  
 353

354 Q: How was the sample chosen?

355 A: Ten projects were included in my sample at the request of Staff. The ten projects are (1)  
356 Skypark Build New 138-12 5kV Substation; (2) Fort Douglas-New 138-12.5 kV Sub &  
357 Trans; (3) Copper Hills New 138-12 5kV Sub; (4) and (5) City Creek Center: New 40  
358 MW Development for PRI Phase II<sup>4</sup>; (6) Cottonwood Prep Plant-System Improvement;  
359 (7) Section Extension-2011; (8) Deer Creek-(1) Used Continuous Miner; (9) Deer Creek-  
360 Reconstruct Longwall System; and (10) JB U4 Wet Stack Conversion. Based on my  
361 initial review of the plant addition descriptions of projects greater than \$5 Million  
362 provided in McDougal Exhibit RMP (SRM-3), pp 8.6.31-39, I added two additional  
363 projects – Terminal Sub and Lake Side 2 Interconnect – for specific inclusion in my  
364 sample. The Terminal Sub project was chosen for review because I was aware of larger  
365 transmission projects in this area, and I wished to review this project for consistency with  
366 other investments. The Lake Side 2 Interconnect project was selected for review because  
367 it is associated with the construction of a new generating unit. The remaining 33 projects  
368 were selected randomly, subject to a few constraints discussed later in this section of my  
369 testimony.

370

371 **Q. Why did you use random selection to choose most of the projects in your sample?**

372 A. My recommendations for reductions in the capital budget for specific projects are limited  
373 only to the projects that I have directly reviewed. I do not represent that any statistically  
374 valid, quantitative extrapolations can be made from my sample to the full capital budget.  
375 However, by using a form of stratified random sampling, I believe my findings can  
376 provide qualitative indications of areas in the wider capital budget that may deserve

---

<sup>4</sup> This project counts as two because one component is a distribution plant project, and another component is a transmission plant project.

377 further study in this or future rate cases. These indications, though hardly conclusive, at  
 378 least cannot be explained away by selection bias on my part (i.e. only picking projects for  
 379 review that I have some reason to believe are flawed).

380

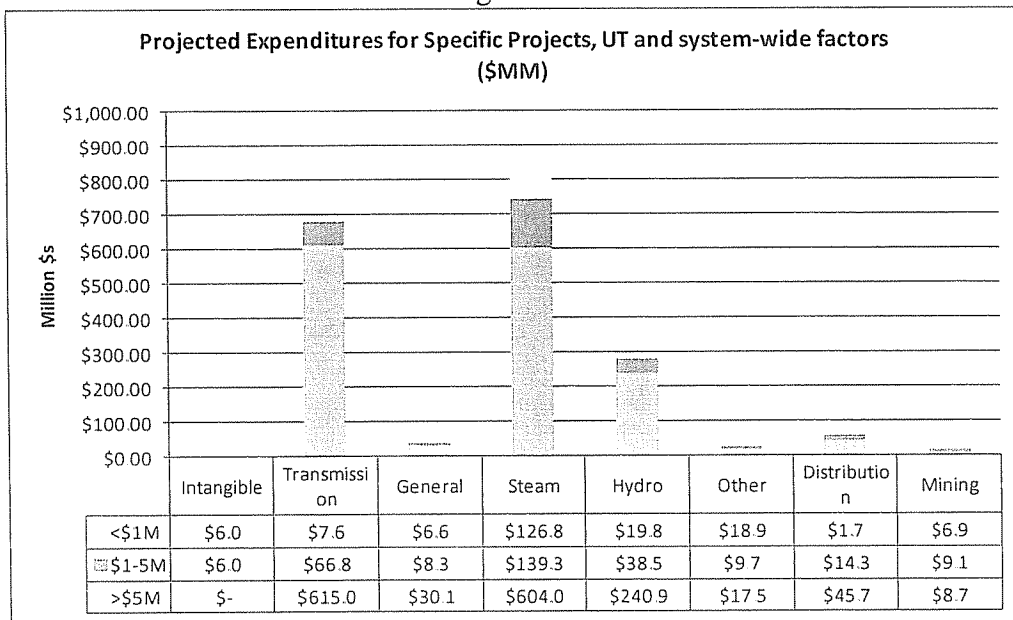
381 **Q. Please describe how you selected your random sample of projects for review.**

382 A. In order to ensure that my sample included projects in all plant type and size categories  
 383 (less than \$1 million, between \$1 and \$5 million, and greater than \$5 million), I designed  
 384 a stratified sample across 23<sup>5</sup> plant type/size categories. I used judgment to determine the  
 385 number of projects to select in each category, taking into consideration the number of  
 386 projects and size of total budget for each category. Figure 10 below shows the breakdown  
 387 of projected expenditures for specific projects by category, and Figure 11 shows the  
 388 distribution of projects in the sample.

389

390

Figure 10

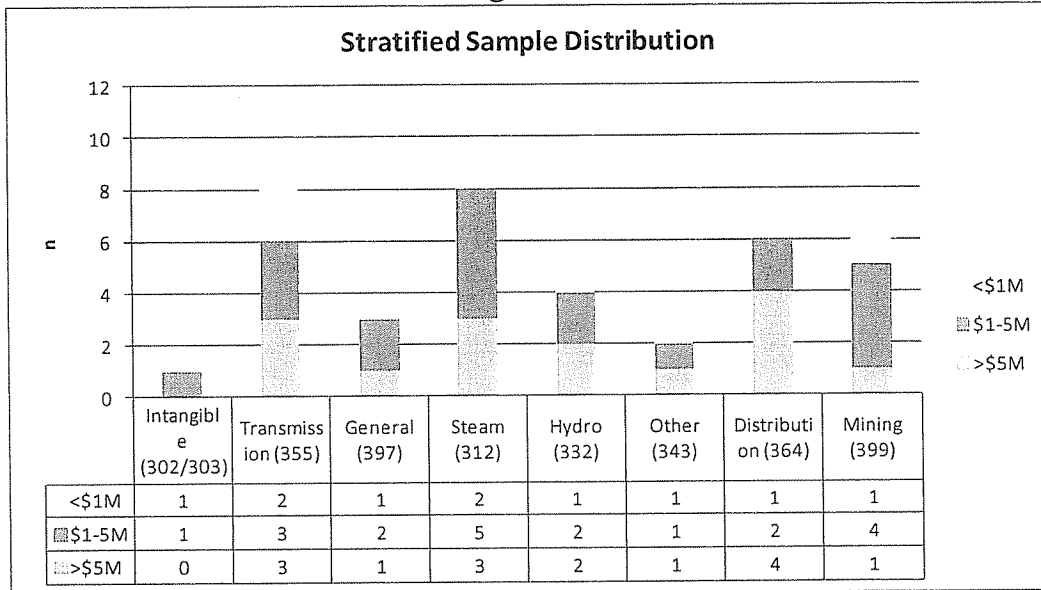


391

<sup>5</sup> Eight plant types times three size levels equals twenty four distinct categories. No projects fall into the Intangible/greater than \$5 million category, so it is omitted.

392  
 393

Figure 11



394  
 395

396 **Q.** Once you determined the stratified sampling distribution, how did you randomly  
 397 select projects for your sample?

398 **A.** First, I excluded certain projects from consideration. Division staff is conducting its own  
 399 review of the Mona to Oquirrh 500/345kV line, so I removed it from the population of  
 400 projects to be sampled. I also removed all projects whose costs would be allocated  
 401 entirely outside of Utah, and those already approved in the previous rate case. To the  
 402 more than 700 projects remaining in the database after these exclusions were made, I  
 403 assigned a random real number between 0 and 1 using Microsoft Excel's random number  
 404 generator function. Finally, I selected the projects from each plant type and size category  
 405 with the highest randomly-generated number, until my sample size and distribution  
 406 matched the plan shown in Figure 11 above.

407

408 **Q:** Did you examine any specific projects that were not included in your sample?

409 A: Yes. Subsequent to the development of the sample list, if I became aware of a new  
410 development that would affect a project that was not included in our sample, I did  
411 examine that project. For example, I became aware that the Company had proposed to  
412 convert the Naughton 3 generating unit to burn natural gas, rather than coal. This caused  
413 me to look for projects in the projected capital spending that involved Naughton Unit 3.  
414 This example is discussed further later in this testimony.

415

416 **X. Analysis of Specific Projects**

417

418 **Q: Can you describe how you analyzed the specific capital projects?**

419 A: My review of the specific projects consisted of an examination of the documentation  
420 provided by the Company in response to data requests. As a threshold matter, I first  
421 reviewed whether the project authorization papers for each project were complete.  
422 Projects without proper authorization should be and were excluded from the projected  
423 capital spending. This is appropriate because if the Company has not yet authorized a  
424 particular capital expenditure, it should not become part of the forward-looking test year  
425 plant in-service that will be paid for by RMP customers. If a project was properly  
426 authorized, I then examined the provided documentation to attempt to answer the  
427 remaining questions listed below. Based upon this review, I determined if any changes to  
428 the Company's proposed capital spending for the June 2011 to May 2013 time period  
429 were appropriate.

- 430 1) Does the appropriate corporate documentation and supporting technical  
431 studies exist?
- 432 2) Did the Company follow its own capital budgeting procedures?

- 433 3) What was the need for the project (i.e., load growth, reliability,  
434 environmental compliance, etc.)?  
435 4) Does that need still exist?  
436 5) Is the project scheduled to be in-service prior to the end of the test year?  
437 6) Are the benefits to Utah commensurate with Utah costs?  
438 7) Could / should the project be deferred?  
439 8) How thorough / appropriate was the evaluation / justification?  
440 9) Were there any cost overruns?  
441 10) Are the costs reasonable?  
442 11) Were any of the project components subject to competitive bidding?  
443

444 Based upon this examination, I identified recommended adjustments to the capital  
445 spending projection prepared by the Company and filed as part of this rate increase.  
446 These specific adjustments are described in the ensuing sections.

447  
448 **A. Naughton U3 Projects**

449  
450 **Q: Please discuss the adjustments that you recommend that are related to the**  
451 **Naughton Unit 3.**

452 **A:** The Company had projected \$1.289 million in capital spending for six specific projects to  
453 upgrade certain coal handling facilities for the Naughton Unit 3. Of this amount, three  
454 projects totaling \$0.722 million were scheduled to be placed in-service between October  
455 and December 2011. The remaining three projects totaling \$0.567 million were  
456 scheduled for December 2012. Each of these projects had an estimated cost of less than  
457 \$1 million. Since the Company has proposed to convert this unit to burn natural gas,  
458 these capital projects should be removed from the projected spending total.

459

460

**B. Lake Side 2 Interconnect**

461

462 **Q: Please describe the Lake Side 2 Interconnect project.**

463 A: This Lake Side 2 Interconnect project calls for the construction of new transmission  
464 facilities to deliver the output from the proposed Lake Side 2 generating unit to the  
465 Company's transmission system.

466

467 **Q. Should an adjustment be made to the projected plant in-service for this project?**

468 A. Yes. The transmission facilities proposed to interconnect the new Lake Side 2 generating  
469 unit should be removed from the Company's forecast of plant additions for the test year.  
470 The generating unit is not scheduled to be in-service until May 2014 or after the May  
471 2013 end date for the test year, and the transmission interconnection is not needed for  
472 other purposes prior to that. Before new power plants are declared commercially  
473 available and therefore placed into service, they undergo testing of the equipment and  
474 actually produce energy to demonstrate that the unit will deliver the benefits it is  
475 supposed to provide. A newly constructed generator is not placed in-service until it has  
476 successfully completed its testing phase. Obviously, you need the transmission  
477 interconnection in order to test the unit (i.e., actually make electricity). But the  
478 transmission interconnection is simply an integral part of the generating unit and should  
479 not be placed in-service ahead of the rest of the plant. The projected spending for this  
480 project should be removed from the Company's test year plant in-service.

481

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**C. Cottonwood Prep**

**Q: Please describe the Cottonwood Prep project.**

A: The Cottonwood Prep Plant project is to construct additional coal handling facilities to increase coal storage capacity and improve reclaiming and blending capabilities.

**Q. What adjustment should be made to the projected plant in-service for this project?**

A. The documentation provided for the Cottonwood Prep Plant System Improvement project shows that the projected in-service date for this project is [REDACTED], which is after the test year. In the confidential response to DPU Data Request 29.7-1, the APR for this project clearly shows a projected in-service date of [REDACTED]. The projected spending for this project should also be removed from the Company's test year plant in-service.

**D. Terminal Substation**

**Q: Please describe the Terminal Substation Project.**

A: The Company proposes to replace two large station class transformers at the Terminal Substation. The cost of this project that is included in the Company's forecast of capital spending is \$42.1 million. The listed in-service date is May 2012.

**Q: What documentation has the Company provided in support of this request?**

A: Based upon documents received in response to DPU Data Request 2.29, the Company has provided 5 electronic documents.



- 505 1. ER #0 Terminal Sub - replace transformers.pdf (2000)  
506 2. IAD #1 Term Sub Replace 345-138 kV XFMR's.pdf (2009)  
507 3. IAD #2 Term Sub Replace 2 345-138 kV XFMR's.pdf (2011)  
508 4. PCN Terminal Transformers\_APR 94000813 APPROVED.pdf (2011)  
509 5. Terminal Substation GM.xls (2011)

510 The first two documents above were prepared in the spring of 2009. The last three  
511 documents were prepared in the spring of 2011. Some additional documentation was  
512 provided in response to DPU Data Request 26.15, but this material contains similar  
513 information as provided in the documents listed above.

514  
515 The 2009 documentation was based upon a need to replace two existing transformers  
516 with two larger transformers. The Company's 2009 analysis states that under certain  
517 contingencies the two existing transformers can become overloaded. An assessment of  
518 the loading on these transformers under various system contingencies was provided, as  
519 was an assessment of alternatives to this project. The larger transformers would avoid  
520 the potential overloads, according to the Company. The two existing transformers will be  
521 re-used at the "Mona and Syracuse projects". The cost estimate in 2009 was \$15.6  
522 million and the expected in-service date was May 2012. Figure 12 below lists the major  
523 equipment assumed to be installed in the 2009 documentation.

524  
 525

Figure 12  
 Major Equipment in 2009 Documentation

Major Equipment	Description	No. of units
345-138 kV XFMR	345-138 kV, 700 MVA transformers	2
138 kV Breakers	138 kV breakers with a continuous rating of 3000 A (40 kA Fault Rating)	1
138 kV Breakers	138 kV breakers with a fault rating of 63 kA	3

526  
 527

528 The 2011 documentation was based upon the same reliability need, and replaced the same  
 529 two transformers. The estimated cost in 2011 was \$48.6 million, including AFUDC and  
 530 \$2.0 million for contingencies. The latest document in the 2011 justification had a  
 531 December 31, 2012 in-service date. The 2011 documentation makes reference to the  
 532 project's eligibility for the 50% bonus depreciation.<sup>6</sup> Figure 13 below lists the major  
 533 equipment to be installed in the 2011 documentation.

534  
 535

Figure 13  
 Major Equipment in 2011 Documentation

Major Equipment	Description	No. of units
345-138 kV XFMR	345-138 kV, 700 MVA transformers	2
138 kV Breakers	138 kV breakers with a continuous rating of 3000 A (40 kA Fault Rating)	2
138 kV Breakers	138 kV breakers with a fault rating of 63 kA	20
138 kV Control House	Standard new Control Building (size?) with batteries, communications HVAC, AC & DC Panels, etc.	1
Station Service	1-metal clad 12.47 kV circuit breaker in the 138/12.47 kV substation and 1 outdoor 12.47 kV circuit breaker in 46/12/47 kV sub	1

536  
 537

538 **Q: Why did the cost increase to \$48.6 million in 2011 from \$15.6 million in 2009?**

<sup>6</sup> Bonus depreciation allows companies investing in new capital assets to depreciate 50% of the new asset in the first year of service, yielding additional tax benefits and serving as an incentive to invest.

539 A: The Company has not provided a detailed reconciliation of these two cost estimates.  
540 However, from the two figures above, it is clear more equipment is being added in the  
541 2011 documentation. In the 2011 documentation, there are 20 138KV circuit breakers  
542 being replaced compared to only 4 138KV circuit breakers in the 2009 justification. In  
543 2011, a new control house is also included, but was not included in 2009.

544  
545 **Q: Has the Company explained why it has added the additional equipment?**

546 A: No. The 2011 PCN that seeks an increase in project funding to \$48.6 million from \$15.6  
547 million still discusses only overloaded transformers. It states that the PCN  
548 “accommodates for the change in project scope and strategy resulting from assessment of  
549 the installation of larger transformers at the substation. It was determined that in order to  
550 ensure proper system reliability with the new capacity, the existing 138 kilovolt yard was  
551 not sufficient and would need to be replaced with new infrastructure and equipment.”  
552 There is no technical or engineering analysis that evaluates or explains the need for a new  
553 control house or the replacement of additional circuit breakers. Without knowing these  
554 details, it is not possible to assess the reasonableness of a \$33 million increase from \$15.6  
555 million to \$48.6 million. Because the \$33 million increase has not been adequately  
556 justified, it should be removed from the projected plant in-service total.

557  
558 **Q: Do you have any other observations on this project?**

559 A; The financial analysis does not seem to account for the retirement or potential salvage  
560 value of the two existing transformers that will be moved to new locations. Reflecting  
561 these items would offset some of the capital additions and reduce the test year rate base.

562 In addition, the delay in the in-service date to December 2012 from May 2012 would also  
563 reduce the test year plant in-service and rate base. The test year plant in-service and rate  
564 base are based upon the average of 13 months of month-end balances. If a May 2012 in-  
565 service date is assumed, the value of the plant installed on that date would be fully  
566 reflected in plant in-service as it would be averaged over all 13 months. If a December  
567 2102 in-service date is assumed, the cost of the plant installed on that date would be in  
568 the 13-month average for only six months. This would mean that only half of the added  
569 plant costs would be included in rates.

570

571 **Q: What do you recommend?**

572 **A:** I recommend that the original 2009 cost estimate of \$15.6 million be used as the basis for  
573 projecting capital additions for the purpose of determining the test year rate base. This  
574 figure is what the Company has adequately justified, and is a reasonable cost for the  
575 scope. While it may be high due to the omission of the retirement /salvage value for the  
576 two existing transformers, it is the most defensible estimate in the documentation that I  
577 have. The increase to \$48.6 million has not been adequately explained or justified. An  
578 in-service date of December 2012 should be used along with the \$15.6 million cost  
579 estimate.

580

581 **E. City Creek Center - New 40 MW Development**

582

583 **Q: Please describe the City Creek project.**

584 A: The City Creek project is a new mixed residential and commercial development in  
585 downtown Salt Lake City. The project was originally approved internally by the  
586 Company in 2007 with an expected in-service date of July 2010. Project costs were  
587 \$43.7 million, with \$36.7 million invested by RMP and \$7.0 million paid by PRI, the  
588 developer of City Creek, as a Contribution in Aid of Construction (“CIAC”). Over time,  
589 the Company has consistently estimated the project’s cost at \$43.7 million including  
590 contingency. The latest documentation provided by the Company indicates a May 2012  
591 in-service date and a \$38.16 million cost estimate. The reduced cost is due to the  
592 developer constructing certain electric distribution facilities at its expense of \$5.55  
593 million, rather than make a cash CIAC payment. Figure 14 below provides a summary of  
594 the documentation received for this project.

595 Figure 14

City Creek Project - Summary of Documentation									
Document	Date Prepared	Projects Costs w/o		RMP Costs w/o		Projects Costs w/		In-Service Date	Spent To Date
		Contingency	CIAC	Contingency	Contingency	Contingency	MW		
IAD6-phase I	10/2007			\$0.15				2/2008	n/a
IAD6-phase II	10/2007			\$8.35				10/2009	n/a
IAD6-Phase III	10/2007			\$28.20				7/2010	n/a
IAD6-total	10/2007	\$43.70	\$7.00	\$36.70	\$0.00	\$43.70	28.00	7/2010	n/a
IAD <sup>(1)</sup>	unknown	\$43.70	\$7.00	\$36.70	\$0.00	\$43.70	28.00	5/2012	n/a
IAD-ER <sup>(1)</sup>	1/2008	\$40.82	\$7.00	\$33.82	\$3.38	\$44.20	28.00	7/2010	n/a
ER	2/2008	\$39.33	\$7.00	\$32.33	\$4.37	\$43.70	28.00	7/2010	\$0.00
PCN	3/2008	\$39.33	\$7.00	\$32.33	\$4.37	\$43.70	28.00	7/2010	\$0.14
PCN-2	8/2009	\$39.33	\$7.00	\$32.33	\$4.37	\$43.70	40.00	5/2011	\$1.04
PCN-3	6/2010	\$39.33	\$7.00	\$32.33	\$4.37	\$43.70	40.00	5/2012	\$8.62
Chg diff from PCN-3 <sup>(2)</sup>	2/2012	\$33.79	\$1.46	\$32.33	\$4.37	\$38.16	40.00	5/2012	\$21.82
		\$5.55	\$5.55			\$5.55			

<sup>(1)</sup> Document IAD is very similar to document IAD6 with minor changes. It appears that not all information was updated.

<sup>(2)</sup> Cost of facilities installed by developer in lieu of CIAC.

596  
597

598 Q: Is this project being built solely for the new City Creek development?

599 A: No. Based upon the project justification, it appears that the project will also benefit  
600 existing customers in this area through the upgrade and /or replacement of antiquated  
601 distribution facilities. The project will also provide benefits to future customers who  
602 locate in this area through the expansion of additional transmission connections and  
603 transformers, according to the Company.

604  
605 **Q: Does RMP have policies to deal with new projects that benefit both new and existing**  
606 **customers?**

607 A: The Company has a line extension policy that is described in Regulation 12. The  
608 Company will invest \$1,100 to interconnect each new residential customer. The  
609 extension allowance for commercial customers is determined by the expected annual  
610 revenue. The Company will invest an amount equal to 16 months worth of annual  
611 revenue to interconnect each new commercial customer. If the cost to interconnect a new  
612 customer exceeds these extension allowances, the customer is asked to make a CIAC to  
613 make up the difference. Such a policy is commonplace for electric utilities. These  
614 policies maintain equity between existing and new customers, and avoid having the  
615 existing customer base support a large investment to add a new customer. According to  
616 the Company's response to DPU Data Request 30.16, the Company does not waive the  
617 extension allowance. Regulation 12 also provides for refunds of CIAC payments to the  
618 originally added new customer if additional customers connect to the line extension on a  
619 future date.<sup>7</sup> This provision provides further equity among customers.

620

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<sup>7</sup> See section 3(c)(2). However, the response to DPU Data Request 31.6 states that future customers will not be assigned a portion of the costs of this project to utilize substation capacity.

621 Q: Did the Company adhere to this extension policy?

622 A: In responses to DPU Data Request 31.2, the Company stated that it did not perform an  
623 estimate of a CIAC payment for City Creek. However, a \$7.0 million payment from the  
624 developer is budgeted in the project documentation, indicating that the Company  
625 expected PRI to make a CIAC payment. Even when the developer constructed certain  
626 distribution facilities at its expense of \$5.55 million, it still made a CIAC payment of  
627 \$1.45 million, bringing the total cash and in-kind contribution to the budgeted amount of  
628 \$7.0 million. In order to assess if the \$7.0 million figure was reasonable, I calculated the  
629 estimated CIAC payment using data provided by the Company as shown in Figure 15  
630 below.

631 Figure 15

ESTIMATE OF CITY CREEK CIAC				
Item	Total	PRI	Existing Load	Comment
City Creek Loads, MW	41.8	27.5	14.3	Attach DPU 2 29(2) file City Creek IAD6 pdf
% of total	100%	66%	34%	
Capital Cost, \$M				
phase I&II	\$9.50	\$9.50	\$0.00	Attach DPU 2 29(2) file City Creek IAD6.pdf
Phase III	\$34.20	\$22.60	\$11.60	Attach DPU 2 29(2) file City Creek IAD6.pdf
Total	\$43.70	\$32.10	\$11.60	
PRI commercial revenue		\$7.82		Response to DPU Data Request 31 1(3) - 05-15-2012 - Attachment.xlsx
Commercial allowance		\$10.43		16/12ths of annual revenue per Regulation 12
# Residential units		550		Response to DPU Data Request 31 1(3) - 05-15-2012 - Attachment.xlsx
Residential Allowance		\$0.61		\$1,100 per unit per Regulation 12
RMP Extension Allowance		\$11.04		
PRI Estimated CIAC		\$21.06		
PRI Actual CIAC		\$7.00		
difference		\$14.06		

632  
633

634 The original project justification from 2007 stated that the City Creek project would  
635 support 27.5 MW of new load and 14.3 MW of existing load. Phases I and II of this  
636 project cost \$9.5 million. From the description provided, it appeared that the facilities

637 constructed in these phases would benefit the City Creek new load, so I assigned these  
638 costs to the developer. I allocated the remaining facilities cost, \$34.2 million, between  
639 existing MWs and New MWs on a pro rata load basis. Thus, as shown in Figure 15  
640 above, existing customers should support \$11.6 million and the city Creek Developer  
641 should support \$32.1 million. Using load sheet data provided by the Company in the  
642 response to DPU Data Request 31.3, the extension allowance is estimated to be \$11.0  
643 million. Thus, in order to comport with Company policy, the City Creek developer  
644 should have paid a CIAC payment of \$21.1 million, which exceeds the \$7.0 million  
645 actual CIAC payment by \$14.1 million.

646

647 **Q: What do you recommend to address this differential?**

648 A: Had the Company followed its own procedures and policies, I estimate that the developer  
649 of City Creek would have made a CIAC payment of \$21.1 million, which would reduce  
650 the amount of this project that is added to plant in-service by \$14.1 million. Therefore,  
651 the plant in-service projected for the test year should be reduced by \$14.1 million. If  
652 future customers use the facilities constructed under this project and make a payment to  
653 the Company that would have been refunded to the developer of City Creek, the  
654 Company should retain these revenues, up to the amount of the project assigned to new  
655 customers.

656

657 **Q: Do you have any other observations on the City Creek project as it pertains to the**  
658 **projected plant in-service?**



659 A: On May 21, 2012, the Company provided an update to its capital database with actual  
 660 investments through March 2012. Figure 16 below compares the monthly investments in  
 661 both the original and revised databases. The Company adds actual plant additions  
 662 through March, but does not change the projected entries for May 2012. I think it highly  
 663 likely that these May entries would change as a result of actual investments through  
 664 March. Before relying on the revised database, these May entries should be updated.

665 Figure 16

UTAH CAPEX COMPARISON - ORIGINAL VS. MAY 21ST UPDATE				
	Original	Original	Revised	Revised
	City Creek Center: New 40 MW Development for PRI Phase II (TRNS)	City Creek Center: New 40 MW Development for PRI Phase II (DIST)	City Creek Center: New 40 MW Development for PRI Phase II (TRNS)	City Creek Center: New 40 MW Development for PRI Phase II (DIST)
Month	(TRNS)	(DIST)	(TRNS)	(DIST)
Jul-11	7	-	-	-
Aug-11	29,306	-	-	29,257
Sep-11	4,613	-	-	4,613
Oct-11	-	-	-	9,827
Nov-11	-	-	19,862	-
Dec-11	-	-	-	254,106
Jan-12	-	-	4,720	(1,302)
Feb-12	-	-	-	116
Mar-12	-	-	914,175	3,378,465
Apr-12	-	-	-	-
May-12	4,485,383	17,775,267	4,485,383	17,775,267
Jun-12	-	-	-	-
Jul-12	-	-	-	-
Aug-12	-	-	-	-
Sep-12	-	-	-	-
Oct-12	-	-	-	-
Nov-12	-	-	-	-
Dec-12	-	-	-	-
Jan-13	-	-	-	-
Feb-13	-	-	-	-
Mar-13	-	-	-	-
Apr-13	-	-	-	-
May-13	-	-	-	-
sum	4,519,309	17,775,267	5,424,139	21,450,349

666  
667

668 **F. Skypark 138-12 5kV Substation**

669

670 **Q: Please describe the Skypark 139-12.5kV Substation project.**

671 A: This project involves a new substation which is designed to relieve overloaded  
672 transformers in the South Davis County area. RMP projected \$8.064 million of plant to  
673 be placed in-service in May 2012. It is my understanding that this project has been  
674 placed in-service.

675

676 **Q: Did you identify any concerns with the projection of capital additions associated**  
677 **with this project?**

678 A: Yes. From the documentation and responses to data requests provided by the Company,  
679 it appears from the Company's response to DPU Data Request 31.16 that \$0.773 million  
680 was inadvertently double-counted, and the correct projected amount of plant addition for  
681 this project should be \$7.291 million. Furthermore, approximately \$1.182 million of the  
682 projects costs is associated with excess land that is not used as part of this project and has  
683 been recorded as non-utility as stated in the response to DPU Data Request 31.14.  
684 Therefore, I recommend that the cost of this project in the plant in-service projection be  
685 reduced to \$6.109 million.

686

687 **G. Energy West Deer Creek Mine CAP Forecast**

688

689 **Q: Please describe this project.**

690 A: This capital project consists of 21 smaller projects that relate to the on-going  
691 advancement of the mine operation. The amount included in the projected test year plant  
692 in-service is \$8.652 million, with monthly investments over the October 2011 to May

693 2013 time period. This compares favorably to the estimate of \$8.73 million provided in  
694 attachment DPU 29.1-1 to the response to DPU Data Request 29.1.

695

696 **Q: Please summarize your review of this project.**

697 A: In response to DPU Data Request 29.1, the Company provided a list of the projects that  
698 make up the larger project in Attachment DPU 29.1-1 and documentation for some of the  
699 projects in confidential Attachment DPU 29.1-2. The documentation included APRs for  
700 five of the projects including:

- 701 ○ Mainline extension;
- 702 ○ Mainline belt replacement;
- 703 ○ Section extension;
- 704 ○ Belt drive power center; and
- 705 ○ Overland conveyor belt replacement.

706 The APRs documented \$3.277 million in expenses for these five projects. No  
707 documentation was provided for the other projects included in Attachment DPU 29.1-1.  
708 Figure 17 below shows the 21 projects with the capital expenses included in Attachment  
709 DPU 29.1-1 and the expenses documented by the APRs provided by the Company. I  
710 recommend including the \$3.277 million documented by the Company.

711

712

Figure 17

	Company Estimate in Attach DPU 29.1-1	Cost Documented with APRs in Attach DPU 29.1-2
Lease Acquisition-New Reserves	70,000	
Coal Reserves-Exploration Drilling	635,000	
Mainline Extension	1,127,000	
Mainline Belt Replacement	546,000	
Mainline Ventilation Seals	684,000	
Section Extension	1,196,600	
48" Terminal Group	524,000	
Mine Monitoring/UG Communication	225,000	
Triple Sectionalizing Switch	145,000	
UG Forklift	75,000	
UG Personnel Carrier-Specialty Vehicles	109,000	
Surface Facilities Improvements	150,000	
Intermediate Loading Section	50,000	
Belt Drive Power Center	380,000	
Overland Conveyor Belt Replacement	1,148,000	
Overland Conveyor-C1/C2 Drive & Brake	300,000	
Belt De-watering System	480,000	
I/T Equipment Replacement	122,000	
Safety-Personal Dust Monitors	260,000	
Safety-Handheld Monitors	230,000	
Items < \$100k	266,000	
<b>Total Energy West Deer Creek Mine CAP Forecast</b>	<b>8,722,600</b>	<b>3,277,000</b>

713

714

**H. Scipio Pass - Mineral Mountain Microwave**

715

716 **Q: Please describe this project.**

717 **A:** According to the response to DPU Data Request 26.6, the Scipio Pass - Mineral  
 718 Mountain Microwave project replaces an existing analog microwave that is obsolete and  
 719 is a bottleneck to providing digital communications services for power grid operations,  
 720 security, and administrative services. The Company asserts that this equipment is in need  
 721 of replacement due to obsolescence in functionality, lack of compatibility with new  
 722 devices, poor reliability, and increasing maintenance costs. Furthermore, RMP claims

723 that some failed equipment will be unable to be repaired due to discontinued product  
724 lines, which could cause adverse consequences to the Company. The projected capital  
725 investment is estimated by the Company to be \$2.780 million with an in-service date of  
726 December 2011.

727

728 **Q: What did your review of this project indicate?**

729 A: The APR for this project and the accompanying Executive Report and Authorization  
730 documentation states that the approved budget for this project is \$1.480 million, not the  
731 \$2.780 million reflected in the filing. Therefore, the projected capital spending for this  
732 project should be reduced to \$1.480 million. I note that actual spending through March  
733 2012 for this project is \$1.3 million, which is consistent with the above change in the  
734 Company's test year plant in-service forecast.

735

736 **I. 2GHz Microwave Replacement**

737

738 **Q: Please describe this project.**

739 A: This project involves the replacement of the analog microwave and analog multiplexing  
740 equipment at Pavant and Delta Service Center with digital channel banks. The Richfield  
741 Service Center will have a digital channel bank installation required. According to RMP,  
742 if the 2 GHz frequencies are not replaced or turned off by the end of the year, the FCC, as  
743 mandated, will categorize the Company's frequencies as secondary, which would  
744 interfere with its communications system. The Company included \$0.350 million in the  
745 projected plant in-service estimate with a December 2012 in-service date.

746

747 **Q: What did your review of this project indicate?**

748 A: The documentation provided by the Company consisted of a two-page APR, which  
749 showed an approved budget of \$0.134 million for fiscal year 2013. This document was  
750 created on April 12, 2012. In response to DPU Data Request 26.8, the Company stated  
751 that this project has not been subject to competitive bidding, as it is in “it’s very early  
752 evaluation stages”. Based upon this documentation, the amount included in test year  
753 plant in-service should be reduced to \$0.134 million from \$0.350 million.

754

755 **J. Other Adjustments**

756

757 **Q: Please describe the remaining adjustments that you made.**

758 A: There were several projects for which no or inadequate documentation was provided.  
759 These are the (1) JB U2 Replace Cooling Tower 12/13, (2) Naughton U0 BART Study  
760 for CAM, (3) Currant Crk U2 CSA Variable fee 24k - CTB M, (4) Cholla U4 FABRIC  
761 FILTER BAG REPLACE CY13, (5) Hermiston U0 Auxiliary Boiler, (6) Naughton U0  
762 D10 Replacement, and (7) W-1799 Replace three generators company wide. Because of  
763 lack of adequate documentation, these projects should be removed from the plant in-  
764 service projections.

765

766 **XI. Additional Documentation**

767

768 **Q: In your review of the Company's projection of plant in-service, you identified**  
769 **certain situations where inadequate documentation has been provided. Is it possible**  
770 **that additional documentation may be provided by the Company?**

771 A: Yes, it is possible that additional documentation could be located and provided by the  
772 Company.

773  
774 **Q: How do you recommend that such additional documentation be dealt with?**

775 A: I believe that it would be reasonable to consider such additional documentation, so long  
776 as that documentation existed as of the date of the Company's filing in this proceeding.  
777 In providing such additional documentation, the Company should demonstrate that it  
778 existed as of the filing date.

779

## 780 **XII. Interpretation of Sample Results**

781

782 **Q: Your evaluation of the Company's projected plant additions is based upon a review**  
783 **of certain specific projects in a sample, rather than examining every proposed**  
784 **project. Can the sample results be extrapolated to the entire database of projects?**

785 A: I have treated each project as a unique investment, and have reviewed the specific  
786 documentation provided. My analysis was based upon each individual project.  
787 However, the selection of projects was based upon a stratified random sample, and the  
788 evaluation looked at a wide range of projects of all sizes across all Company functions. I  
789 believe that this approach results in a reasonably representative sample. I reviewed 45  
790 specific projects with total plant additions of \$258 million. I recommend changes in 15

791 of these projects, resulting in a reduction of \$92.4 million. As a result of the recent  
792 decision to convert Naughton Unit 3 to burn natural gas instead of coal, I reviewed an  
793 additional 8 projects with total plant additions of \$1.78 million. I recommend changes in  
794 6 of these projects, resulting in \$1.3 million in reductions. I reviewed 53 generic projects  
795 totaling \$243 million, and recommend changes in 9 of these totaling \$34 million.

796  
797 It might be tempting to attempt to extrapolate the results of the review of the sample of  
798 projects to the entire database of proposed plant additions. I stop short of making such a  
799 recommendation, because each project is unique and such an extrapolation might not be  
800 statistically valid. However, I do believe that the Commission should consider the  
801 possibility that, if I had examined a greater number of projects, additional reductions in  
802 projected plant in-service could be identified. The suggested changes in this testimony  
803 should therefore be considered as conservative.

804

### 805 **XIII. Conclusion**

806

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

808 **A:** At this time, yes, it does. Should additional or new information become available, I will  
809 supplement this testimony as appropriate.