

1 **Q. Please state your name, business address and position with PacifiCorp (the**  
2 **Company).**

3 A. My name is Mark C. Mansfield. My business address is 1407 West North Temple,  
4 Suite 310, Salt Lake City, Utah. My position is vice president, thermal operations for  
5 PacifiCorp Energy.

6 **Q. Are you the same Mark C. Mansfield that presented direct testimony in this**  
7 **docket?**

8 A. Yes, I am.

9 **Q. Please describe your education and business experience.**

10 A. I have a Bachelor of Science degree in mechanical engineering from Brigham Young  
11 University, and a Masters in Business Administration from the University of Utah.  
12 During my career, I have served as an engineer and maintenance supervisor at the  
13 Carbon Plant; Maintenance Superintendent at the Hunter Station; Director of  
14 Technical Support for PacifiCorp's Generation Engineering in Salt Lake City, Utah,  
15 and as the Plant Manager for the Naughton, Huntington and Hunter Stations. I was  
16 appointed vice president of thermal operations in August 2006 with responsibilities  
17 for PacifiCorp's coal-fueled, gas-fueled and geothermal generation assets and  
18 operations.

19 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

20 A. The purpose of my testimony is to rebut several pieces of testimony; the life spans of  
21 combustion turbines and combined cycle combustion turbines provided by Mr. Jacob  
22 Pous and Mr. Charles King and several of the arguments made by Mr. Jacob Pous  
23 concerning the decommissioning costs used by the Company.

24 **Q. Would you please summarize your rebuttal testimony?**

25 A. My rebuttal testimony will show that the Company's estimates for estimated  
26 depreciable lives for the combustion turbines and combined cycle combustion  
27 turbines are prudent and that the proposed \$50 per installed kilowatt for the  
28 decommissioning costs of a thermal plant is a reasonable value.

29 **Life Spans of Combustion Turbines**

30 **Q. What is your response to the arguments made both Mr. King and Mr. Pous that**  
31 **the combustion turbines lives are underestimated?**

32 A. Both Mr. King and Mr. Pous make the argument that because steam plants have  
33 longer lives than initially estimated, combustion turbines should have longer lives  
34 also. They base this assumption on the fact that production assets are a collection of  
35 smaller pieces of equipment that are replaced as they wear out and thereby extend  
36 the overall life of the asset. While it is true that a production asset is composed of  
37 many separate pieces of equipment that can be replaced on an individual basis, it  
38 may not always be economic to do so. The Company does not have any empirical  
39 data to support a life longer than 25 years for its simple cycle combustion or 35 years  
40 for its combined cycle turbines. The issue is the considerable uncertainty about  
41 whether a simple cycle combustion or combined cycle combustion turbine will  
42 continue to be economic to operate, repair and maintain after 25 and 35 years of  
43 operation respectively due to the uncertainty in fuel prices, emission regulations and  
44 alternative energy sources.

45

46 **Q. Please respond to the national studies that show longer lives for existing**  
47 **combustion turbines.**

48 A. The Company contends that national studies or data bases do not account for  
49 differences in the running hours, capacity factors, maintenance and capital programs.  
50 All of the above mentioned issues will add to or reduce the overall life of any asset.

51 **Q. Please respond to the arguments made by Mr. Pous that the Company knows of**  
52 **no reasons why power purchase agreements, tied to asset lives, can not be**  
53 **extended.**

54 A. To the contrary, there is no reason in today's conditions to presume that any seller  
55 would be willing to extend a power purchase agreement. Given the current  
56 uncertainty in future fuel prices, emission regulations and restrictions upon  
57 permissible generation options; it is not reasonable to assume that power purchase  
58 agreements tied to asset lives can be extended, and certainly not without extensive  
59 renegotiation.

60 **Q. Please respond to the arguments made by Mr. Pous that the Company knows of**  
61 **no reasons why asset lives can not be extended for longer periods.**

62 A. Although the Company maintains its assets at a level that will provide a high degree  
63 of reliability and availability to our customers, as mentioned above, the uncertainty  
64 in future fuel prices, emission regulations and restrictions upon permissible  
65 generation options make it imprudent for the Company to assume at this time that the  
66 lives of these assets will be extended.

67

68 **Q. Please respond to the accusation that the Company historically underestimates**  
69 **its life spans.**

70 A. The Company maintains that it is prudent in estimating the lives of its assets. It also  
71 recognizes that, with experience in operating assets, better estimates of useful lives  
72 are available. It would be imprudent on the part of the Company to project lives  
73 beyond what it can reasonably forecast based on its knowledge of the asset and its  
74 operating history.

75 **Decommissioning Costs**

76 **Q. Please respond to Mr. Pous' claim that the Black & Veatch study is flawed.**

77 A. The study by Black & Veatch was produced in response to an order during the last  
78 depreciation study. The contract to perform the study was openly bid and awarded on  
79 cost and ability to perform the work. The Company feels that the Black & Veatch  
80 study fairly represents the true costs of decommissioning its plants. It demonstrates  
81 the economy of scale between an older smaller plant such as Carbon and a newer  
82 larger plant such as Hunter. It recognizes the differences in site accessibility,  
83 potential asbestos removal and other site specific issues.

84 **Q. Please respond to Mr. Pous' statement on the removal cost for the Hale plant.**

85 A. Mr. Pous points to the removal cost at the Hale plant as a validation of the \$25 per  
86 installed kilowatt. It is true that between 1993 and 1995 when the Hale plant was  
87 decommissioned the cost averaged \$27 per installed kilowatt. If corrected to 2007  
88 dollars, using the Handy-Whitman indices, it would be in the \$42 to \$45 per installed  
89 kilowatt range. Additional factors to consider include that plants currently in the  
90 Company's fleet have had added significant additional environmental equipment

91 which would not have been included in the Hale plant decommissioning costs. In  
92 addition, over the last 10 years continued changes have taken place related to  
93 restrictions primarily related to environmental laws which the Company must  
94 comply with during the decommissioning process. These issues both have the  
95 potential of adding significant dollars to the average cost per installed kilowatt to  
96 remove a plant.

97 **Q. Does the Company have a history of selling assets rather than decommissioning**  
98 **them?**

99 A. No. Mr. Pous points to the sale of the Centralia plant and several small hydro  
100 facilities. The Centralia plant was sold before the end of its useful life because it was  
101 determined to be uneconomic as a result of costs to install pollution control  
102 equipment and the liabilities associated with the potential closure of the Centralia  
103 mine. The Naches hydro projects were sold to avoid the re-licensing costs that would  
104 have made the project uneconomic.

105 The Hale and Jordan steam plants were both retired and later  
106 decommissioned by removing all of the structures and equipment as represented in  
107 the Black & Veatch study.

108 **Q. Does the company expect these estimates to change over time?**

109 A. Yes. The current estimate is based on the cost of removing existing facilities today  
110 and is expressed in 2007 dollars. Over time, inflation, the addition of incremental  
111 new equipment to either meet legal requirements or improve operating efficiencies,  
112 and changes in laws regulating the decommissioning of facilities will cause the cost  
113 to decommission each facility to increase.

114

115 **Conclusion**

116 **Q. Based on the foregoing testimony, what conclusions have you reached?**

117 A. It is my opinion that the estimated lives for the simple-cycle and combined-cycle  
118 combustion turbines are reasonable and provide the basis for the retirement dates in  
119 Mr. Roff's study. Furthermore, I conclude that the decommissioning costs used to  
120 determine the terminal net salvage amounts are reasonable and conservative based on  
121 the Black & Veatch study and the Company's actual history of removal of existing  
122 facilities based on current values.

123 **Q. Does this conclude your testimony?**

124 A. Yes.