

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

2 A. My name is Darrell T. Gerrard. My business address is, 825 NE Multnomah St.,
3 Suite 1600, Portland, Oregon 97232. I am Vice President of Transmission and
4 Distribution Engineering and Asset Management in the Company's Power
5 Delivery Division (PD).

6 **Qualifications**

7 **Q. Please describe your educational background and work experience.**

8 A. I received a Bachelor of Science Degree in Electrical Engineering from the
9 University of Utah and received a Certificate of Completion in Electricity from
10 Utah's Technical College. In addition to formal education, I have attended
11 various educational, professional and electric industry seminars, and serve on
12 several association boards and hold several memberships and positions in industry
13 associations, as shown on Exhibit UP&L___(DTG-1). I joined the Company in
14 1980 and during those 25 years, I have held various operational and engineering
15 positions of increased responsibility providing extensive experience working
16 across PacifiCorp's service territory prior to assuming my current position.

17 **Q. What are your responsibilities as Vice President of Transmission and**
18 **Distribution Engineering and Asset Management?**

19 A. I am responsible for developing maintenance and construction strategies for
20 PacifiCorp's transmission and distribution (T&D) networks. I am also
21 accountable for future investment planning to ensure safe, economic and reliable
22 energy delivery systems for our customers.

23 **Purpose of Testimony**

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

25 A. The purpose of my testimony is to explain the reason for the test period
26 expenditures necessary for operation and maintenance of PacifiCorp's Utah
27 electrical transmission and distribution system. I will explain how these
28 incremental increases contribute to the overall revenue requirement supported by
29 the testimony of Mr. Ted Weston. My testimony explains why these costs are
30 increasing at a rate greater than inflation, and the circumstances that are driving
31 those expenditures now and in the future. Many of the increases are necessary to
32 respond to the continued levels of significant growth in new customers and
33 electrical loads in Utah. In addition PacifiCorp plans further implementation of a
34 number of the specific operational and maintenance programs that will bring the
35 Utah systems into optimum maintenance cycles, improve reliability and maintain
36 safety. The Company will also continue to improve its efforts to provide excellent
37 customer service in the face of the increasing demands placed upon our system.
38 PacifiCorp is implementing programs and measures that will help to minimize
39 long-term costs by striking a balance between operational expenses, preventative
40 maintenance and capital expenditures. Implementation of these measures will
41 improve the Company's ability to provide reliable and safe service over the long
42 term for its customers at the least cost.

43 **Description of Expenditures**

44 **Q. Please describe the expenditures you will be discussing in your testimony.**

45 A. These expenditures can be classified into three general categories: operations

46 expenses, maintenance expenses, and capital expenses. I will describe each of
47 these briefly as it is important to understand why these expenditures are required
48 and the importance of a utility to efficiently balance all three of these costs for the
49 benefit of our customers.

50 **Operations Expense**

51 **Q. Please describe what is included in operations expenses.**

52 A. Operations expenses are typically those required to carry out the day to day
53 activities associated with operating the Utah electric T&D system and all activities
54 required to support the Company's business of serving customers. These include
55 expenses associated with call center management, bill processing and collections,
56 meter reading, meter installation, locating facilities, responding to customer
57 requests, restoring the system during outages and storms, repairing faults, and
58 switching and configuration of our transmission and distribution systems for
59 optimum seasonal operations.

60 **Q. Please explain the reasons for the increase in operations expenses**

61 A. Operations expenses can fluctuate due to circumstances beyond PacifiCorp's
62 control. One such circumstance is the economy which directly or indirectly drives
63 load growth, new connections, meter installations, connection and disconnection
64 activity, and collections. Another circumstance that affects expenses is the
65 weather, which drives customer bill inquiries, call center volumes and outage
66 restorations. Load growth in Utah is a key driver for the increase in operations
67 expenses. Load growth increases the utilization of PacifiCorp's distribution and
68 transmission system and it also forces the expansion of the system. As the system

69 increases in size, increased expenditures are required to ensure the safe and
70 effective operation of the system. The Company is also staging in new programs
71 and control systems required to improve operational performance, reliability and
72 to support customer service commitments. At the same time, PacifiCorp can
73 exercise some control over these operations expenses by performing maintenance
74 and by making prudent capital additions for system upgrades and expansions,
75 which help to control these types of expenses over the long term. PacifiCorp
76 continues to look for efficiencies in planning and executing our work.

77 **Maintenance Expense**

78 **Q. What is included in maintenance expenses?**

79 A. Maintenance expenses include both preventative maintenance and corrective
80 maintenance. Preventative maintenance expenses are considered those required for
81 preemptive purposes to provide vegetation management, sustain asset life, keep
82 assets in servable condition, maintain safety requirements, prevent premature
83 failures, and achieve expected asset life cycles. Corrective maintenance
84 expenditures are required to correct operational, reliability and safety conditions
85 identified as conditions on the system either as a result of inspection programs or
86 from storms or external damages. Our asset management objectives support
87 maintenance efforts by providing inspection/correction programs and preventative
88 maintenance planning that are linked strongly to capital investment planning.

89 **Q. Please explain the reasons for the increase in maintenance expenses.**

90 A. An increase in maintenance spending is required for the Company to inspect its
91 growing Utah distribution system on a more frequent basis and to correct

92 conditions found during these inspections before they become detrimental to the
93 system and create operational or safety issues. The Company has been making a
94 prudent ramp up in the level of maintenance investment in Utah to facilitate a
95 systematic approach to inspecting and maintaining network facilities with
96 increased frequency as the Company has performed in some other states.

97 **Q. What will be the result of increased maintenance spending as proposed in**
98 **this rate case?**

99 A. During the test period PacifiCorp will be increasing maintenance and tree
100 trimming expenditures above current levels and the Company will begin full
101 implementation of what I believe are the optimum level inspection and
102 maintenance programs that will need to be sustained in Utah. The end result will
103 be improved reliability and service to customers and an increased stability of
104 ongoing operations costs associated with T&D system operations. Increasing the
105 level of maintenance and focusing on specific programs will enable the Company
106 to achieve agreed to Performance Standard commitments and Customer Service
107 Guarantees in the state of Utah. PacifiCorp's inspection, maintenance programs
108 include the following:

- 109 ➤ Provide for planned maintenance and vegetation management that
110 optimizes system reliability while minimizing long term cost.
 - 111 • 3 year tree trimming and vegetation management cycle
- 112 ➤ Increased maintenance spending will establish a program with optimal
113 cycles beginning in FY 2007.
 - 114 • Safety inspections every 2 years
 - 115 • Underground detailed inspections every 4 years
 - 116 • Detailed inspections of overhead systems every 10 years (after
117 initial 5 year program is completed)

- 118
- Test and treat wood poles every 10 years
- 119
- Fix correctable conditions within reasonable and economic time
- 120
- frame
- 121
- Perform preventative maintenance on major substation equipment
- 122
- to extend life and prevent premature equipment failure

123

124 **Q. What are the increased maintenance costs associated with vegetation**
125 **management in Utah and why are these costs increasing?**

126 A. PacifiCorp is accelerating its vegetation management program in Utah to establish
127 and maintain a 3-year distribution system trimming cycle beginning in fiscal year
128 2006. This cycle will improve reliability to Utah customers by reducing potential
129 for system outages due to trees interfering with lines. This cycle will improve
130 reliability to Utah customers by reducing the potential for system outages due to
131 trees interfering with lines. This cycle will also optimize “on cycle trimming and
132 spot trimming” on the distribution system and reduce long run vegetation
133 management costs post cycle. PacifiCorp has a designated team of arborists and
134 vegetation management professionals to manage this program and deliver results.
135 The increased costs for this program that are above base line levels for the period
136 are \$3.7 million.

137 **Capital Spending**

138 **Q. What is the reason for the increased capital spending in the test period?**

139 A. T&D capital additions are driven by several factors, many of which are outside the
140 Company’s direct control. A primary driver is the increase in the number of
141 customers that the Company serves in Utah, as well as load additions from
142 existing customers. This sustained growth is described in the testimony of Mr.

143 Mark Klein and the planned capital plant additions are included in Mr. Weston's
144 exhibits. Load additions from existing customers on existing networks require the
145 capacity of these networks to be upgraded. In his testimony and exhibits, Mr.
146 Klein describes the continued growth levels in Utah. PacifiCorp is adding more
147 than 200 Mw of distribution station capacity in Utah on an annual basis. This
148 load growth is expected to continue and represents the equivalent of adding
149 around 23,000 customers to the Company's Utah system annually, which requires
150 a corresponding infrastructure investment to supply these new customers with
151 electricity.

152 **Q. Are there other reasons driving the need for the increase in capital spending**
153 **besides load growth?**

154 A. Yes. In addition to customer load growth there is also considerable capital
155 spending targeted to enhance the reliability of the PacifiCorp's service in Utah.
156 The Company has seen recent improvements in its service metrics and the
157 Company's plan is to continue this improvement year after year. Sustained and
158 consistent capital investment programs are necessary to replace aging and
159 deteriorating assets through planned asset replacement programs. In addition the
160 company has agreed to a series of customer guarantees and service performance
161 standards that require additional capital investment and maintenance to improve
162 reliability and customer service levels. These investments are required in order to
163 upgrade and expand our T&D systems to serve new customers; to serve load
164 growth caused by existing customers; to sustain or improve reliability; to maintain
165 safety; and, to relocate or replace assets due to deterioration, age or end of useful

166 life. Also during the test period, the Company is planning significant transmission
167 substation and power line construction in order to integrate new generation
168 resources into the electric grid to serve native load.

169 **Q. Please explain the need for replacement of aging assets and system upgrades**

170 A. Capital investment is necessary to replace aging assets prior to failure and to
171 upgrade the system in specific areas in order to sustain or in some cases improve
172 existing reliability levels. As with many western utilities, a large portion of the
173 Company's existing asset base was installed in the 1950's, 60's and 70's, and due
174 to normal aging processes, these assets are nearing the point of replacement,
175 which may be preceded by increased failures and higher maintenance costs. A
176 few examples of assets that are targeted for replacement include: obsolete oil-type
177 circuit breakers, station transformers with high-failure tap changers,
178 electromechanical station meters and relays, sub-transmission lines, distribution
179 lines, poles and cross arms, switchgear, and underground cable. The targeted
180 system upgrades include: storm hardening improvements to lines, lightning
181 protection improvements, expansion of substation SCADA systems improved
182 capability for load transfers in urban areas, infrastructure to support new
183 generation resource additions, and physical security enhancements dictated by the
184 Federal Energy Regulatory Commission and the National Electricity Reliability
185 Council. As the PacifiCorp's system ages and demand increases place additional
186 requirements on the system, it is imperative that the Company keep pace with the
187 service requirements that customers expect.

188

189 **Q. What benefits will Utah customers receive from these increased investments?**

190 A. The proposed expenditures and associated programs will allow PacifiCorp to
191 increase system reliability in Utah in the face of challenges posed by the
192 combination of dramatic load and customer growth and our aging asset base. Utah
193 customers on average, will experience fewer outages and improved restoration
194 time when outages do occur. Historically PacifiCorp and ScottishPower agreed to
195 implement a number of performance standards and customer service guarantees.
196 We have maintained an excellent track record in fulfilling these commitments
197 over 5 years ending March 31, 2005. The Company is committed to continue this
198 level of excellence in providing customers with quality service, while improving
199 reliability. However, given the increased demands PacifiCorp is facing in Utah,
200 these performance levels can only be maintained through increased capital
201 spending and a more systematic implementation of preventative and corrective
202 maintenance.

203 **Q. What are the long-term advantages of increasing maintenance and capital**
204 **spending now?**

205 A. PacifiCorp is working to increase current maintenance activity and spending in
206 order to achieve a smooth and more predictable long-term operations run-rate and
207 capital spend. Striking an appropriate balance between operational expenses and
208 maintenance spending will extend the life of the assets, improve the level of
209 system performance, and minimize long-term costs. In short, it will maximize the
210 value of each dollar spent on the system, to the benefit of our customers. The
211 Company's investment modeling and experience demonstrates a correlation

212 between maintenance activities, service reliability and the overall health of utility
213 assets. As noted above, a balance is necessary between operations and
214 maintenance work. PacifiCorp has experienced steadily increasing costs for both
215 overhead and underground fault response and repair, and in recent inspection
216 cycles the Company is logging an increasing number of “conditions for repair”. It
217 should be expected that as new inspection programs are implemented there will be
218 an initial increase in “conditions for repair” This increasing trend will reverse
219 itself only if the investment levels requested in this rate case are granted and these
220 “conditions for repair” are corrected and cleared off the system.

221 **Q. How does PacifiCorp go about making sure operations and maintenance is**
222 **performed in a timely, efficient and effective manner, and that funds are**
223 **spent appropriately for the customers’ benefit?**

224 A. Power Delivery verifies the status of achieving its goals through budgeting,
225 planning and tracking systems and internal business control processes. There are
226 several ways in which the Company monitors and measures performance through
227 work management, system planning, project scheduling and asset tracking tools.
228 For example, Customer Call Center technology provides real time customer data,
229 while Resource Utilization Tools track operations, maintenance and capital
230 workforce needs. Our Facilities Point Inspection Program is used to track
231 inspection cycles as well as conditions found on the system that need correction.
232 The recent addition of a new maintenance Organizer (MO) is being used to gain
233 efficiencies in repair, planning and execution. PacifiCorp also employs its SAP
234 system to establish and manage cyclical Preventative Maintenance Plans and

235 collect maintenance cost data for Transmission and Distribution (T&D)
236 substations and apparatus. Another example is the separation of the operations
237 and maintenance budgets through the use of an Activity Based Costing tool which
238 tracks operation and maintenance activities for both work units and costs per unit.
239 We also use a Prosper Outage reporting tool which tracks system performance for
240 outage analysis and input for maintenance/capital spending decisions.
241 Additionally, PacifiCorp utilizes a Capital Investment Planning tool to aid in the
242 evaluation of risk, reliability and economic value. This process is employed to
243 prioritize the numerous capital investments PacifiCorp must consider each year.
244 PacifiCorp also uses Primavera software, a well known industry tool, for planning
245 and scheduling our many complex multi-year T&D capital projects. Finally, the
246 PacifiCorp uses financial processes and systems to prioritize, track and monitor
247 spending against the Company's plans. All of these systems and processes, and
248 the staff that support, develop and use this information, allows the Company to
249 perform work efficiently and effectively. These activities are aimed at providing
250 quality service to our customers at the lowest long-term cost, consistent with
251 meeting the service standards that we believe our customers want and deserve.

252 **Q. Is there any additional evidence that supports the plans to increase spending**
253 **in this area and how will the Commission be assured monies in this case will**
254 **be used for customer benefit?**

255 A. During the last 12 months PacifiCorp has worked actively and cooperatively as a
256 member of the Utah Customer Service Quality Review Group to document, explain
257 communicate and report quarterly investment plans and service quality measures as

258 part of the last Utah rate case in Docket 04-035-45 and Docket 04-035-01. The
259 reports clearly show the targeted Utah investment levels and programs in 2006 are
260 on track, they are being measured and the programs are being delivered.
261 PacifiCorp's most recent report shows that maintenance unit work is ahead of plan,
262 distribution system investment is above plan and tree trimming will be completed
263 on plan at year end. This information clearly demonstrates PacifiCorp is keeping
264 its commitment to improve reliability and service levels in Utah and the Company
265 is willing to be held accountable for the delivery of rate based programs to
266 customers and regulators.

267 **Q. What other evidence does PacifiCorp have to support improvements to**
268 **customers' service and to support further investment as submitted in this**
269 **case?**

270 A. The high level of investment in the system has resulted in a direct benefit to
271 customers as evidenced by the following indicators:

272 ➤ In FY 2006 PacifiCorp received the Global Call Center of the Year Award
273 from the Incoming Calls Management Institute.

274 ➤ In FY 2006 an independent study performed by TQS Research, Inc. found
275 that PacifiCorp ranks number one in overall customer service in a national
276 survey of large commercial and industrial electric customers.

277 ➤ In FY 2006 PacifiCorp received the Service Quality Measure Group's
278 award for the highest residential customer satisfaction scores in the energy
279 industry.

280 ➤ In FY 2006 the Company was recognized by J.D. Powers and Associates

281 as one of the most improved utilities.

282 ➤ For the first half of FY 2006 the Company has achieved a 99.9% success
283 rate in meeting its Customer Guarantee commitments under the modified
284 program that went into effect on April 1, 2005 and the Company is
285 meeting the Performance Standards 100%.

286 ➤ In FY 2006 the Company reduced its meter reading error rate to rank
287 among the top quartile of electric utility performance.

288 These improvements have been made possible due to investments the Company
289 has made that streamline the process and focus on the customer. The continuation
290 of ongoing initiatives and the addition of new initiatives will further improve the
291 level of service provided to our customers. Some of the new initiatives include:

292 ➤ Implementation of digital cellular technology for remote meter reading and
293 continuing to install radio frequency meters to mitigate access issues and
294 improve efficiency in high growth areas.

295 ➤ Development of an Energy Cost Management Program to help commercial
296 and industrial customers conserve energy.

297 ➤ Improvement to communications with small and mid-size business and
298 government customers by changes to call routing and handling.

299 ➤ Implementation of changes to improve automated outage reporting.

300 ➤ Improvements to call center technology and development of a first call
301 resolution baseline for customer calls.

302 These service improvements will benefit customers by increasing the accuracy of
303 metering information. This will, in turn, provide accurate billing information to

304 customers. Service improvements are also aimed at commercial customers to
305 both save energy and provide a targeted point of contact where highly trained
306 employees can assist commercial customers with the more complex issues that
307 arise for this customer class. Finally, the improvements in outage call handling
308 and call center technology will provide customers with quicker and more accurate
309 information. The focus on first call resolution is part of the call handling
310 improvement initiative to ensure that customers get their questions answers
311 correctly the first time they call to reduce the need for follow up.

312 In summation, expenditures are necessary to fund customer service initiatives if
313 the Company is to maintain and improve upon the excellent level of service that
314 customers receive today. In addition, the growth in the number of Utah customers
315 necessitates the need for increased funding. Finally, the Company's new
316 commitments to meet the Utah Performance Standards and Customer Guarantees
317 will require the expenditure levels included in this application.

318 **Summary**

319 **Q. Is it your testimony that the expenditures that you have described will be**
320 **incurred during the test period and are necessary to maintain and develop a**
321 **reliable system in Utah?**

322 A. Yes. It is my testimony that the Company will incur significant increases in
323 expenditures during the test period and that the recovery of these expenditures is
324 critical to meeting the service quality and reliability standards that Utah customers
325 expect.

326

327 **Q. Does this complete your direct testimony?**

328 **A. Yes, it does.**