

1 **Introduction**

2 **Q. Please state your name, business address and present position with**
3 **PacifiCorp (“Company”).**

4 A. My name is Cory E. Scott. My business address is 825 NE Multnomah Street,
5 Suite 1600, Portland, Oregon, 97232. My present position is Director of
6 Transmission Policy.

7 **Qualifications**

8 **Q. Briefly describe your educational background and business experience.**

9 A. I hold a bachelor’s degree in Chemistry from St. John’s University in Minnesota,
10 and a master’s degree in Environmental Studies from Bard College in New York.
11 I also completed studies through preliminary exams at the University of Idaho
12 leading to a doctoral degree in Natural Resources. Prior to joining PacifiCorp in
13 2005, I held positions focused on energy and environmental management,
14 including more than ten years as a consultant managing environmental issues,
15 primarily for companies in the oil and gas pipeline industry. I have been
16 employed by PacifiCorp for over five years. Prior to my current role, I was
17 employed by PacifiCorp Energy, from 2005 to 2009, as the Relicensing Manager
18 for the Klamath Hydroelectric Project.

19 **Q. Have you been personally involved in the negotiations related to the Klamath**
20 **Hydroelectric Settlement Agreement?**

21 A. Yes. I have been part of PacifiCorp’s negotiating team since 2005.

1 **Purpose and Overview of Testimony**

2 **Q. What is the purpose of your testimony?**

3 A. The purpose of my testimony is to provide an overview of how the costs of
4 relicensing the Klamath Hydroelectric Project (“Project”) were developed through
5 the relicensing process; the Company’s assessment of relicensing costs; the
6 sources of the cost information included in the Company’s assessment; and an
7 overview and inventory of the analyses and studies related to the costs and risks
8 of potential relicensing and dam removal outcomes.

9 **Q. Please describe how you have organized your testimony.**

10 A. First, I briefly describe how information is developed through the complex
11 relicensing process on the potential protection, mitigation, and enhancement
12 (“PM&E”) measures likely to be required in a new license. Second, I briefly
13 describe the Company’s assessment of the overall costs of relicensing the Project
14 and the process used to develop those costs. Third, I provide an overview of the
15 information contained in the relicensing record that has informed the Company’s
16 view of the costs and risks for customers related to various relicensing outcomes,
17 and I provide an inventory of the pertinent documents. Fourth, I describe the
18 Company’s assessment of the costs of relicensing the Project and the costs of
19 settlement under the Klamath Hydroelectric Settlement Agreement (“KHSA”).

20 **Development of Relicensing Measures and Costs**

21 **Q. How does the relicensing process inform what PM&E measures would be
22 required to relicense the Project?**

23 A. The traditional Federal Energy Regulatory Commission (“FERC”) relicensing

1 process consists of three stages of consultation. Generally, these stages inform
2 the development of PM&E measures as follows:

3 In the first stage, the applicant distributes an Initial Consultation
4 document, which describes the project and its operation and environmental setting
5 to federal and state agencies, tribes, non-governmental organizations (“NGOs”),
6 community interest groups and other stakeholders. It also presents the studies that
7 are recommended to identify project impacts. Through consultation with
8 stakeholders, these study plans are refined. Stage one ends when a set of
9 resource-by-resource study plans and stakeholder consultation documentation has
10 been completed and provided to FERC. PacifiCorp initiated this process for the
11 Project in December 2000.

12 In the second stage, the applicant conducts the proposed studies that
13 provide data to clarify project impacts. Based on study results, various PM&E
14 measures are identified by the applicant and project stakeholders to address
15 project impacts. The costs of these measures are typically developed and
16 presented in technical reports prepared for resource areas, including aquatic
17 resources, terrestrial resources, cultural resources, water resources, and recreation.
18 The applicant then prepares a draft license application that includes its proposal
19 for recommended PM&E measures. The draft license application is distributed to
20 FERC and to interested agencies, tribes and stakeholders for review and
21 comment. At this stage, agencies routinely request additional studies, and FERC
22 may also request additional information. The second stage ends when FERC
23 accepts a final application for filing. PacifiCorp submitted its final license

1 application for Klamath relicensing in February 2004.

2 In the third stage, FERC analyzes the license application and may require
3 the applicant to supplement the license application to address any deficiencies,
4 which can result in additional studies or the development of cost estimates for
5 alternative PM&E measures. FERC also solicits initial comments and
6 preliminary terms and conditions from agencies, tribes, and stakeholders. FERC
7 may require additional information from the applicant to address any comments
8 submitted by the agencies, tribes, and stakeholders. When FERC determines the
9 application is complete, it serves notice that the application is ready for
10 environmental analysis and a review of the application pursuant to the National
11 Environmental Policy Act (“NEPA”) proceeds. FERC issued its Ready for
12 Environmental Analysis notice for the Klamath relicensing in December 2005.

13 After the Ready for Environmental Analysis notice is issued, a series of
14 additional processes are triggered. Federal agencies prescribe final terms and
15 conditions that must be included in a new license issued by FERC to protect
16 environmental resources under their stewardship. Analysis of the application
17 under the Endangered Species Act also proceeds and biological opinions of the
18 impact of the proposed action are developed. Agency terms and conditions,
19 through mandatory prescriptions and biological opinions can result in additional
20 PM&E measures.

21 In reviewing the Project, FERC prepares a draft environmental impact
22 statement, which is used to solicit public comment, and then prepares a final
23 environmental impact statement (“FEIS”) incorporating the mandatory agency

1 prescriptions. When the license application is ready for environmental analysis,
2 the applicant also applies for water quality certification from the states under
3 CWA Section 401. Through this process, the states determine what measures or
4 conditions must be met for the project to attain relevant water quality standards.
5 FERC must then incorporate the terms contained in the CWA Section 401
6 certification into a final project license. Among other water quality requirements,
7 CWA Section 401 certifications can require that the project attain the load
8 allocations assigned to the project under the total maximum daily load (“TMDL”)
9 process. Ultimately, it is the totality of the regulatory process, including FERC’s
10 analysis, federal mandatory conditioning authority, the water quality certification
11 processes and review and compliance under the endangered species act that
12 informs the measures required to relicense the project.

13 **Q. Who ultimately decides what the required PM&E measures are?**

14 A. No single party determines the final PM&E measures. FERC issues a FEIS that
15 includes PM&E measures, but before a new license is issued it must incorporate
16 the mandatory agency prescriptions and the conditions included in state CWA
17 Section 401 water quality certifications. In addition, measures necessary for
18 compliance under the endangered species act may also be required.

19 **Q. How are the costs for the likely PM&E measures determined?**

20 A. Most of the cost estimates for likely PM&E measures are developed by the
21 applicant through the preparation of resource technical reports and through
22 responses to additional information requests from FERC during the license review
23 process. These cost estimates are often based on cost information from similar

1 projects and the preparation of specific cost estimates for mitigation measures,
2 and are refined over time as additional measures are identified and defined. Other
3 cost estimates may be developed by intervenors as they recommend alternative
4 PM&E measures or different project alternatives. Some costs are developed by
5 FERC staff as they develop their own recommended PM&E measures.

6 **Q. When and how are the required PM&E measures and costs finalized?**

7 A. The costs of relicensing are not finalized until all required PM&E measures have
8 been implemented. Even though the new license prescribes the required PM&E
9 measures, it cannot cap the costs of those measures. As PM&E measures are
10 designed and implemented, the costs of the measures often change in response to
11 site-specific conditions. Furthermore, agencies often maintain the authority to
12 reopen a license and require new conditions if additional improvements are
13 deemed necessary.

14 **Overview of Relicensing and Settlement Costs**

15 **Q. Please provide an overview of the Company's estimated costs to relicense the**
16 **Project.**

17 A. The Company's estimated costs to relicense the Project include in excess of \$400
18 million in capital and in excess of \$60 million in operations and maintenance
19 ("O&M") costs over a 40-year license term. Of these capital costs, the majority is
20 related to implementation of aquatic resource PM&E measures. These costs are
21 related to providing volitional upstream and downstream fish passage at all
22 Project developments, which is required by the mandatory agency terms and
23 conditions. Additional funding would be required for terrestrial resource PM&E

1 measures, recreational resource PM&E measures, land use PM&E's, and cultural
2 resource PM&E measures. The remaining capital costs are for water quality
3 improvements to address temperature and dissolved oxygen effects of the Project
4 reservoirs and to address water quality concerns related to algae. Consistent with
5 PacifiCorp's license application, the East Side and West Side developments
6 would be decommissioned and removed. A presentation of these estimated costs
7 is included as Confidential Exhibit PPL/301.

8 The PM&E measures contained in the Company's baseline relicensing
9 scenario generally include those measures specified in the "Staff alternative with
10 Mandatory Conditions" alternative in the FERC FEIS. The costs of measures
11 included in the "Staff Alternative with Mandatory Conditions" have been
12 escalated to current dollars since the costs contained in the FEIS were in 2006
13 dollars. Because the CWA Section 401 water quality certification process for the
14 Project is not yet complete, the water quality measures necessary to obtain a new
15 license remain highly uncertain. Thus, the Company's relicensing scenario
16 includes measures that have been evaluated during the FERC process to address
17 the water quality effects of the Project, as an estimate of what might be required.

18 In addition to the capital and O&M expenditures to implement the
19 required PM&E measures, the relicensing scenario also reflects a 20 percent
20 reduction in the energy that would be produced from the Project. This is due to
21 the requirement to provide more water to bypassed reaches of the Klamath River,
22 which makes less water available for generation. This most significantly impacts
23 generation at the J.C. Boyle development, where compliance with agency terms

1 and conditions on flows would reduce generation more than 40 percent. J.C.

2 Boyle is by far the largest generation facility in the Project.

3 **Q. What information sources were used to derive these costs?**

4 A. The majority of the costs included in the Company's analysis are in the FERC
5 record and contained or referenced in Appendix A of the FEIS. Some costs were
6 developed from PacifiCorp internal estimates and generation impact models.

7 Given the uncertainty related to the costs to implement measures required to
8 obtain CWA Section 401 water quality certifications from California and Oregon,
9 water quality costs include measures explored during the relicensing proceeding
10 to address project-related water quality effects.

11 **Q. Please provide an overview of the Company's assumed costs of implementing**
12 **the KHSA.**

13 A. The Company's assessment of the costs of settlement include approximately \$9
14 million in capital costs and approximately \$70 million in costs that would be
15 characterized as O&M costs. The majority of the capital costs reflect the costs of
16 interim water quality improvements and hatchery improvements. Increased
17 funding for hatchery programs and ongoing hatchery production following dam
18 removal represents approximately half of the O&M costs. Other funding
19 requirements include restoration and study funding, lands and cultural resources
20 funding, aquatic habitat enhancement, water quality monitoring and improvement
21 costs. Implementation and management costs are also reflected in the O&M
22 costs. Implementation costs also include the decommissioning of the East Side
23 and West Side development at a cost of approximately \$3 million, and the \$172

1 million dam removal customer surcharge. A presentation of these estimated costs
2 is included as Confidential Exhibit PPL/302.

3 **Q. How were these costs derived?**

4 A. The majority of the costs included in the Company's assessment of settlement
5 costs are derived from Appendices C and D of the KHSA. These appendices list
6 the interim measures that the Company must implement prior to dam removal.
7 Many of the interim measures consist of capped funding obligations for specific
8 resource areas such as hatcheries, aquatic habitat enhancement, water quality
9 monitoring, water quality studies and improvements, and land management
10 activities. Other costs for specific interim measures are estimates of what might
11 be necessary to fulfill the obligation spelled out in the interim measure based on
12 the costs to develop certain infrastructure or implement specific projects. As with
13 the relicensing case, some costs are developed from PacifiCorp internal estimates
14 and generation impact models.

15 **Risks Related to Relicensing, Settlement and Removal Costs**

16 **Q. What cost risks does relicensing present for customers?**

17 A. The risk of increasing costs is one risk relicensing presents for customers. The
18 PM&E measures included in the Company's assessment of relicensing costs are
19 based on the best estimates available as developed during the relicensing
20 proceeding several years ago. As such, there is always a risk that costs for
21 PM&E measures will escalate as measures are fully designed and constructed.
22 This represents a risk to customers since a new license would prescribe the
23 construction of certain facilities to mitigate project effects and establish fish

1 passage regardless of the ultimate cost of those measures. Consultation with
2 agencies, as required by a new license, can also increase the scope and cost of
3 PM&Es as design standards and agency criteria change.

4 The cost of additional PM&E measures is another risk relicensing presents
5 for customers. Agencies have reserved authority to require additional mandatory
6 PM&E's to address changed environmental conditions or the potential
7 ineffectiveness of required PM&Es to attain the desired benefits. Thus,
8 additional PM&E measures could be required during the term of a new Project
9 license that would result in costs to customers in excess of what is reflected in
10 known relicensing costs at this time.

11 There are also other process-related risks that licensing presents for
12 customers. As one example, if the state of Oregon or California denied a CWA
13 Section 401 water quality certification, FERC would be unable to issue a new
14 license, yet maintains that it has the authority to require the owner to
15 decommission and remove the project facilities at the owner's expense.

16 **Q. Do you believe that the costs assumed in the baseline relicensing scenario**
17 **are conservative?**

18 A. Yes. Absent a settlement among parties, it is clear that the Company would
19 continue to face significant opposition to relicensing. My observation is that on
20 balance the stakeholders would attempt to drive the costs of relicensing as high
21 as possible in an effort to make relicensing uneconomic. As discussed above,
22 there are also significant risks related to the Company's ability to secure state
23 CWA Section 401 water quality permits.

1 **Q. How do these risks compare to the risks under the Company's settlement**
2 **scenario?**

3 A. Continuation down a path of relicensing presents far greater risks to customers
4 than settlement under the KHSA. Under the KHSA, cost obligations are well-
5 defined and largely capped. For the interim measures that do not have a cost
6 cap, the relative cost risk is much less than under relicensing given the extensive
7 scope and costs associated with measures required under relicensing.

8 Additionally, transferring the dams prior to removal, along with other key
9 protection measures outlined in the KHSA, further minimize cost risk.

10 **Q. Has the Company undertaken a comprehensive analysis of the costs of**
11 **Project removal?**

12 A. No. PacifiCorp has not attempted to complete a comprehensive analysis of the
13 costs of Project removal given the many risks and uncertainties. Large
14 uncertainties include the costs of sediment management, minimizing and
15 mitigating environmental impacts related to removal, water quality and
16 endangered species impacts, infrastructure impacts, and site re-vegetation and
17 restoration costs. Many of these uncertainties can only be better defined through
18 the removal design and permitting process. The KHSA is designed to shield
19 customers from the risks and liabilities of dam removal while ensuring that a
20 comprehensive science-based review is undertaken prior to the Secretarial
21 Determination of whether removal of the dams is in the public interest.

1 **Q. What information has informed the Company's views of the costs and risks**
2 **of relicensing and Project removal?**

3 A. The Company's views of the costs and risks of relicensing and Project removal
4 has been informed by many sources, nearly all of which are contained within the
5 FERC record for the relicensing proceeding, including:

- 6 • The Company's license application
- 7 • Final technical reports
- 8 • Final technical studies prepared by numerous parties
- 9 • The Company's responses to additional information requests
- 10 • Comments on the license application by stakeholders and regulatory agencies
- 11 • The agencies' terms and conditions
- 12 • Biological opinions
- 13 • CWA Section 401 water quality certification applications
- 14 • The water quality agencies' views of project impacts as evidenced by written
15 statements, technical reports, and public testimony
- 16 • The TMDL regulatory process material, and
- 17 • Historical reports.

18 In addition, several third parties have undertaken studies related to the
19 costs and risks associated with dam removal. Such studies include a
20 comprehensive assessment of the potential risks and liabilities related to removal
21 of the Klamath dams (Camp Dresser and McKee Inc., 2008) commissioned by the
22 Department of the Interior and various studies on dam removal costs, sequencing
23 and environmental impacts commissioned by the California Coastal Conservancy.

1 Exhibit PPL/303 provides a comprehensive inventory of the studies PacifiCorp
2 has reviewed throughout the settlement process.

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

4 A. Yes.