

Exhibit ___ TC (DN-1TC)
Docket UE-090205
Witness: David Nightingale
REDACTED VERSION

**BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**PACIFICORP D/B/A PACIFIC POWER
& LIGHT COMPANY,**

Respondent.

DOCKET UE-090205

TESTIMONY OF

DAVID NIGHTINGALE

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

IN SUPPORT OF SETTLEMENT

Issues Related to Chehalis Plant and Marengo II

September 22, 2009

**CONFIDENTIAL PER PROTECTIVE ORDER
REDACTED VERSION**

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1 I. INTRODUCTION

2
3 **Q. Please state your name and business address.**

4 A. My name is David Nightingale. My business address is the Richard Hemstad
5 Building, 1300 South Evergreen Park Drive SW, Olympia, Washington, 98504-
6 7250.

7
8 **Q. By whom are you employed and in what capacity?**

9 A. I have been employed by the Washington Utilities and Transportation Commission
10 (“Commission”) as a Senior Regulatory Engineering Specialist since February 2009.

11
12 **Q. What are your duties as a Senior Regulatory Engineering Specialist?**

13 A. My current duties involve analysis of issues related to Commission regulation of
14 electric utilities, including integrated resource planning, requests for proposals,
15 greenhouse gases emissions performance standard compliance, and power supply
16 acquisition, and providing that analysis to the Commission. This is my first time
17 testifying before the Commission.

18
19 **Q. Please describe your education and relevant employment experience.**

20 A. I hold a Bachelor of Arts degree in Business Administration from Western
21 Washington University, Bellingham. I also hold a Bachelor of Science degree in
22 Energy Engineering from the University of Washington, Seattle, where my studies
23 focused on fluid-dynamics, thermo-dynamics, and alternative energy. I performed

1 research and designed projects, including testing residential conservation standards
2 in four fully-instrumented model homes (this research led to the justification for
3 what became the Super Good Cents program), cost-effectiveness of residential solar
4 hot water heating, and design of a small wind turbine system on Orcas Island. .

5 From 1987 to 1991, I worked for RW Beck and Associates, an engineering
6 consulting firm in Seattle. While with RW Beck, I worked on county and state waste
7 system planning, landfill development, and waste-to-energy (renewable biomass)
8 project evaluation and analysis for clients in Washington and Alaska.

9 From 1991 to the start of 2009, I worked for the Washington Department of
10 Ecology (Department of Ecology) in various capacities; as a planner, engineer,
11 technical unit supervisor, statewide technical-lead, and policy staff. My projects
12 included technical review and regulatory compliance of renewable biomass projects,
13 such as landfill gas energy projects, variously-fueled pyrolysis plants and proposals,
14 and fluidized-bed and mass-burn waste-to-energy plants (for the City of Tacoma,
15 City of Spokane and others). I was also responsible for technical review and
16 regulatory assistance for coal combustion products recycling and disposal options for
17 TransAlta's Centralia power generation plant as well as combustion products
18 disposal for Avista's Kettle Falls wood-fuel plant.

19
20 **II. SCOPE OF TESTIMONY AND OVERVIEW**

21
22 **Q. Please identify the scope of your testimony, and state your conclusion.**

1 A. My testimony addresses whether the Commission has sufficient support for the
2 requested Commission findings contained in the Settlement Stipulation that the
3 Company's acquisition of the Chehalis Generating Plant (Chehalis Plant) and the
4 Company's expansion of the Marengo wind project (Marengo II) were prudent, that
5 these facilities are used and useful, and that it was appropriate for PacifiCorp to defer
6 Chehalis Plant-related costs. (Settlement Stipulation Section III.M, Paragraphs 26 &
7 27, and Section III.B, Paragraph 12, respectively).

8 I conclude that for the most part, the Company's direct case provides
9 sufficient support for these findings. However, I supply some additional
10 information, mostly related to the finding regarding the Greenhouse Gases Emissions
11 Standard, in Section III.B in Paragraph 12 of the Settlement Stipulation.

12 In my testimony, I refer to several provisions of various statutes and rules. In
13 doing so, I provide my understanding of these laws and rules in my capacity as a
14 Regulatory Specialist.

15
16 **Q. Please briefly describe the Chehalis Plant.**

17 A. The Chehalis Plant is a six year old, 520 MW natural gas-fired electric generation
18 facility, located near Chehalis, in western Washington, which is within the
19 Company's West Control area (WCA). It consists of two combustion gas turbine
20 generators, one steam turbine generator, and related equipment. PacifiCorp
21 purchased the facility on September 15, 2008, and is the sole owner of the plant. The
22 plant is operational.

1 **Q. Please briefly describe Marengo II.**

2 A. Marengo II is a 70.2 MW wind resource consisting of 39 wind turbine generators
3 located near Dayton, in eastern Washington, which is also within the WCA. This
4 project reflects an expansion of the existing wind farm, known as Marengo I.
5 PacifiCorp completed construction of the Marengo II facilities in June 2008, and is
6 the sole owner of Marengo II. The facilities are operational.

7
8 **Q. What information did you evaluate in conducting your analysis?**

9 A. I reviewed the direct testimony and exhibits of PacifiCorp witnesses Richard Reiten,
10 Romita Biswa, Mark Tallman, Stefan Bird, Gregory Duvall, and R. Bryce Dalley,
11 and I reviewed PacifiCorp's responses to over 50 data requests. I also reviewed the
12 Company's Integrated Resource Plan (IRP), its Request for Proposals (RFP)
13 analysis, the transaction documents, plant design documents, and many related
14 documents. I also reviewed various statutes and rules, and the documents related to
15 the rulemaking processes. Finally, I gathered information based on interviews with
16 personnel of the Energy Facilities Siting Evaluation Council (EFSEC) and the
17 Department of Ecology, because these agencies have implementation and
18 enforcement roles under the Greenhouse Gases Emissions statute, RCW 80.80,
19 which apply to the Chehalis Plant.

20
21 **Q. Before proceeding further, please briefly describe what IRPs and RFPs are, and**
22 **the related processes.**

1 A. The IRP projects the utility's likely future resource needs as well as the most
2 advantageous types of resources to acquire in order to meet those needs. In addition to
3 acquisition of generating resources, the IRP also calls for a blend of demand side
4 management and market purchases to serve the needs of the Company's customers in the
5 WCA. The utility develops its IRP in consideration of a balanced acquisition of both
6 supply and demand-side resources through a public process. As part of the resource
7 acquisition process, the Company issues an RFP to seek bids from resource suppliers. In
8 this instance, PacifiCorp issued an RFP for acquiring generating resources in 2012, but
9 the Chehalis Plant was not offered in response to that RFP. Subsequent to the issuance of
10 that RFP, PacifiCorp approached the owners of the Chehalis Plant to find out if it might
11 be possible to acquire the Chehalis Plant at terms more favorable than what the RFP
12 responses had provided. Once that opportunity arose, prompt action was necessary to
13 consummate the acquisition that did not permit use of another RFP process.

14 15 III. USED AND USEFUL FOR SERVICE

16
17 **Q. What used and useful findings are identified in the Settlement Stipulation?**

18 A. The Commission is requested to make findings that the Chehalis Plant and Marengo
19 II are "used and useful for service to Washington customers." (Settlement
20 Stipulation Section III.M, Paragraphs 26 & 27).

1 **Q: What is the importance of the used and useful for service issue?**

2 **A.** It is my understanding that in order for a resource to be included in rate base for
3 ratemaking purposes, the resource must be “used and useful for service” in
4 Washington State.¹ The Commission considered this requirement in PacifiCorp’s
5 last contested general rate case, Docket UE-050684. The Commission stated that the
6 phrase “used and useful for service in this state” means “to benefit the ratepayers of
7 Washington, either directly (e.g., flow of power from a resource to customers) and/or
8 indirectly (e.g., reduction of cost to Washington customers through exchange
9 contracts or other tangible or intangible benefits).”² The Commission also stated that
10 “the Company must demonstrate tangible and quantifiable benefits to Washington of
11 resources in the system before we will include the resources in rates.”³

12

13 **Q. Are the Chehalis Plant and Marengo II used and useful for service in**
14 **Washington?**

15 **A.** Yes. These facilities are operating, and are currently directly providing a “flow of
16 power from a resource to customers.” Both facilities are located in the WCA and are
17 available to provide power to the Company’s Washington service territory.
18 Therefore, the findings that the Chehalis Plant and Marengo II are used and useful
19 for service in Washington are well supported.

20

¹ See RCW 80.04.250.

² *Wash. Utilities & Transp. Comm’n v. PacifiCorp, d/b/a Pacific Power & Light Co.*, Docket UE-050684, Order 04 at 21-22, ¶ 50 (April 17, 2006).

³ *Id.* at 27, ¶ 68.

1 **Q. What factors does the Commission use to evaluate the prudence of a utility's**
2 **electric resource acquisition?**

3 A. There is no single set of factors. For example, in Cause U-83-26, the Commission
4 applied thirteen factors, which the Commission characterized as "unique" and stated
5 that "[a]dditional factors may be considered in subsequent cases as dictated by the
6 facts."⁵ In subsequent cases, the Commission and its Staff⁶ have generally focused
7 on the following four factors, which I applied in this case:

- 8 1) *The Need for the Resource* - The utility must first determine whether new
9 resources are necessary. Once a need has been identified, the utility must
10 determine how to fill that need in a cost-effective manner. When a utility is
11 considering the purchase of a resource, it must evaluate that resource against
12 the standards of what other purchases are available, and against the standard
13 of what it would cost to build the resource itself.⁷
14
15 2) *Evaluation of Alternatives* - The utility must analyze the resource alternatives
16 using current information that adjusts for such factors as end effects, capital
17 costs, dispatchability, transmission costs, and whatever other factors need
18 specific analysis at the time of a purchase decision. The acquisition process
19 should be appropriate.⁸
20
21 3) *Communication With and Involvement of the Company's Board of Directors* -
22 The utility should inform its board of directors about the purchase decision
23 and its costs. The utility should also involve the board in the decision
24 process.⁹
25
26 4) *Adequate Documentation* - The utility must keep adequate contemporaneous
27 records that will allow the Commission to evaluate the Company's decision-
28 making process. The Commission should be able to follow the utility's

⁵ *Wash. Utilities & Transp. Comm'n v. The Wash. Water Power Co.*, Cause U-83-26, Fifth Supplemental Order at 15-16 (January 19, 1984).

⁶ *E.g., Wash. Utilities & Transp. Comm'n v. Puget Sound Energy, Inc.*, Docket UE-070565, Testimony of Douglas Kilpatrick, Exhibit 117 at 3:18-5:9.

⁷ *Wash. Utilities & Transp. Comm'n v. Puget Sound Power & Light Co.*, Docket UE-921262, *et al.*, Nineteenth Supplemental Order at 11 (September 27, 1994).

⁸ *Wash. Utilities & Transp. Comm'n v. Puget Sound Energy, Inc.*, Docket UE-031725, Order 12 at 9, ¶ 20 (April 7, 2004).

⁹ *Id.*

1 decision process; understand the elements that the utility used; and determine
2 the manner in which the utility valued these elements.¹⁰
3

4 Implicit in the prudence standard is that the facility in question needs to comply with
5 applicable state laws. This has specific relevance in this case because of recent legislation
6 regarding greenhouse gases emissions and renewable portfolio standards. I discuss these
7 statutes later in my testimony.
8

9 **B. APPLICATION OF THE PRUDENCE STANDARD**
10

11 **Q. Does the Company's direct testimony adequately support prudence findings for**
12 **Company's acquisition of the Chehalis Plant and Marengo II?**

13 A. Yes. The direct testimony and exhibits of Mr. Bird and Mr. Duvall provide this
14 support, which I confirmed. I note that while the final decision to acquire each
15 facility was made by PacifiCorp's CEO, rather than the Board of Directors, based on
16 my analysis, I believe a reasonable board of directors would have approved these
17 acquisitions.¹¹
18

19 **Q. What is the Greenhouse Gases Emissions Performance Standard?**

20 A. As it applies in this case, the Greenhouse Gases Emissions Performance Standard is
21 "one thousand one hundred pounds of greenhouse gases per megawatt-hour." (RCW

¹⁰ *Id.* at 10, ¶ 20.

¹¹ The Commission has referred to the prudence standard as asking what "a reasonable board of directors and company management [would] have decided given what they knew or reasonably should have known to be true at the time they made a decision." *Wash. Utilities & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-060266 & UG 060267, Order 08 at 56, ¶ 164 (January 5, 2007).

1 80.80.040(1)(a)).¹² This standard must be met by an [1] “electrical company” that
2 acquires [2] “baseload electric generation” via a [3] “long-term financial
3 commitment” [4] “after June 30, 2008.” (RCW 80.80.040(1)). As RCW
4 80.80.060(1) states: “No electrical company may enter into a long-term financial
5 commitment unless the baseload electric generation supplied under such a long-term
6 financial commitment complies with the greenhouse gases emissions performance
7 standard.”

8
9 **Q. In your opinion, are the Chehalis Plant and Marengo II subject to this**
10 **standard?**

11 A. Yes. However, renewable resources such as Marengo II are deemed to comply with
12 the Greenhouse Gases Emissions Performance Standard, (RCW 80.80.040(3)), so I
13 need not further address Marengo II on that compliance issue. Turning to the
14 Chehalis Plant, PacifiCorp qualifies as an “electrical company,” because that term
15 means “a company owned by investors that meets the definition of RCW 80.04.010,”
16 (RCW 80.80.010(12)), which in turn defines electric companies subject to UTC
17 regulation. PacifiCorp acquired the Chehalis Plant via a “long-term commitment”
18 “after June 30, 2008” because PacifiCorp acquired the plant on September 15, 2008,
19 and a “long-term financial commitment” includes “a new ownership interest,” (RCW
20 80.80.010(15)), so PacifiCorp’s new ownership of the plant satisfies this definition.

21 Finally, the Chehalis Plant is “baseload electric generation,” for the reasons I explain

¹² According to the statute, this is the applicable Greenhouse Gases Emissions Performance Standard until the Washington Department of Commerce (formerly the Department of Community, Trade and Economic Development) develops a different standard, a process that begins in 2012. (RCW 80.80.040(1)(b) and 80.80.050).

1 later in my testimony. Therefore, I concluded that the Chehalis Plant was and is
2 subject to the Greenhouse Gases Emissions Performance Standard.

3
4 **Q. Is the Chehalis Plant in compliance with the greenhouse gas emissions per**
5 **megawatt hour of energy generated of less than 1,100 pounds?**

6 A. Yes. In early 2009, the Energy Facility Siting Evaluation Council (EFSEC) issued a
7 letter certifying that the Chehalis Plant emitted less than 1,100 pounds of greenhouse
8 gas emissions per megawatt hour in 2007, and therefore complied with the standard
9 that year. This certification letter is my Exhibit ____ (DN-2). Therefore, I conclude
10 that PacifiCorp's Chehalis Plant is both subject to the Greenhouse Gases Emissions
11 Performance Standard, and complies with that standard.

12
13 **Q. What is the Renewable Portfolio Standard?**

14 A. The Renewable Portfolio Standard is contained in the Energy Independence Act,
15 RCW 19.285. In part, this Standard requires certain electric utilities to acquire
16 eligible renewable resources, and/or any equivalent renewable energy credits, to the
17 following extent:

18 " (i) At least three percent of its load by January 1, 2012, and each year
19 thereafter through December 31, 2015;

20 (ii) At least nine percent of its load by January 1, 2016, and each year
21 thereafter through December 31, 2019; and

22 (iii) At least fifteen percent of its load by January 1, 2020, and each year
23 thereafter." (RCW 19.285.040 (2)(a)).

1 **Q. Is PacifiCorp subject to the Renewable Portfolio Standard?**

2 A. Yes. PacifiCorp meets the definition of a “qualifying utility,” including the 25,000
3 customer threshold. (RCW 19.285.030(16)).
4

5 **Q. Is Marengo II an eligible resource for purposes of the Renewable Portfolio
6 Standard?**

7 A. Yes. The statute includes wind power in its list of eligible renewable resources.
8 (RCW 19.285.030(18)(b)). Marengo II also meets the requirements that an eligible
9 resource commence operation after March 31, 1999 (Marengo II commenced
10 operation in June 2008) and the resource either be located in the “Pacific
11 Northwest,” or the output delivered there (Marengo II is located in Washington, and
12 Washington is in the area defined as “Pacific Northwest”). (RCW 19.285.030(10)
13 and (18)).¹³
14

15 **Q. Is PacifiCorp making progress towards Renewable Portfolio Standard
16 compliance?**

17 A. Yes. According to PacifiCorp’s 2007 IRP Update, the Company projects for 2009
18 that 118 MW of its 3,343 MW load in the WCA will be met with renewable
19 resources; about 3.5% of the load. Much of this is supplied by the Goodnoe Hills
20 and Marengo I wind farms. These two projects are located in Eastern Washington
21 and have a combined nameplate capacity of approximately 170 MW. The Marengo

¹³ According to RCW 19.285.030(14): “Pacific Northwest’ has the same meaning as the same term is defined in Section 3 of the Pacific Northwest Electric Power Planning and Conservation Act (94 Stat. 2698; 16 U.S.C. § 839a)” which in turn defines “Pacific Northwest” in pertinent part to mean: “the area consisting of the States of Oregon, Washington, and Idaho ...”

1 II project will add to the Company's renewable resource portfolio and further the
2 Company's progress to meeting the Renewable Portfolio Standard.
3

4 **Q. What do you conclude from this information?**

5 A. The Company's acquisition of Marengo II is justified in part by the need to comply
6 with the Renewable Portfolio Standard. The Company appears to be making
7 substantial progress toward meeting that standard at the "compliance checks" in
8 2012 (three percent of load) and 2016 (nine percent of load). This is important,
9 because wind projects have significant development timelines, and there are
10 additional current and near term constraints on development of these resources such
11 as infrastructure for interconnection, and transmission limitations. Moreover, highly
12 productive wind sites located in close proximity to existing transmission are
13 becoming scarce. For all of these reasons, it is prudent to plan far in advance for
14 meeting the Renewable Portfolio Standards.
15

16 **Q. What is your conclusion regarding the prudence of PacifiCorp's acquisition of
17 the Chehalis Plant and Marengo II?**

18 A. Based on the documents I reviewed and the analysis I conducted, I conclude that
19 there is a sufficient basis for the Commission to find that the Company was prudent
20 to acquire these facilities, even though the Company's Board of Directors did not
21 make the decision to approve these acquisitions.
22
23

1 **V. DEFERRAL OF CHEHALIS PLANT COSTS**

2

3 **Q. What finding regarding deferrals is identified in the Settlement Stipulation?**

4 A. Settlement Stipulation Section III.B, Paragraph 12, asks the Commission to make the
5 following finding: “The Company’s acquisition of the Chehalis generating plant
6 complies with the Greenhouse Gases Emissions Standard in RCW 80.80.040(1) and
7 therefore, the Company was allowed to defer certain costs related to that plant, per
8 RCW 80.80.060(6).”

9

10 **Q. What is the significance of a Commission determination that a particular**
11 **project is baseload generation that complies with the Greenhouse Gases**
12 **Emissions Performance Standard?**

13 A. As I discussed above, one aspect relates to whether the acquisition is prudent.
14 Another aspect relates to whether the Company was able to defer certain expenses
15 associated with the resource for possible later recovery from ratepayers.

16 As RCW 80.80.060(6) states: “An electrical company may account for and
17 defer for later consideration by the commission costs incurred in connection with the
18 long-term financial commitment, including operating and maintenance costs,
19 depreciation, taxes, and cost of invested capital.” That subsection also provides that
20 the deferral may begin when the plant begins operation, and ends when the
21 Commission issues an order in a general rate case or other proceeding for recovery
22 of such costs.

1 **A. “BASELOAD ELECTRIC GENERATION”**

2
3 **Q. Did you previously address the requirements for compliance with the**
4 **Greenhouse Gases Emissions statute?**

5 A. Yes. I addressed them in my discussion of the prudence of the Chehalis Plant
6 acquisition, though I referred the “baseload electric generation” issue to this section
7 of my testimony.

8
9 **Q. How is “baseload electric generation” defined in the Greenhouse Gases**
10 **Emissions statute?**

11 A. “Baseload electric generation” is defined as “electric generation from a power plant
12 that is designed and intended to provide electricity at an annualized plant capacity
13 factor of at least sixty percent.” (RCW 80.80.010(4)).

14
15 **Q. What does “plant capacity factor” mean?**

16 A. Plant capacity factor means “the ratio of the electricity produced during a given time
17 period, measured in kilowatt-hours, to the electricity the unit could have produced if
18 it had been operated at its rated capacity during that period, expressed in kilowatt-
19 hours.” (RCW 80.80.010(16)). In other words, because there are 8,760 hours in a
20 non-leap year, a plant operating at a capacity factor of at least 60 percent would
21 operate at least 5,256 hours per year (.60 * 7860).

1 **Q. Does the statute provide direction for evaluating whether a resource provides**
2 **“baseload electric generation?”**

3 A. Yes. According to the statute: “In determining whether a long-term financial
4 commitment is for baseload electric generation, the commission shall consider [1]
5 the design of the power plant and [2] its intended use, based upon ... [i] permits
6 necessary for the operation of the power plant and [ii] any other matter the
7 commission determines is relevant under the circumstances.” (RCW 80.80.060(3)).

8
9 **Q. What do you conclude from this list of factors?**

10 A. I conclude that the statute places primary focus on the operational characteristics of
11 the plant, i.e., the design and the permits, and any similar operating characteristic,
12 such as technical or legal operating restrictions. The owner or operator’s intent for
13 operating the plant is relevant, but it is not the primary focus.

14
15 **Q. What else supports your conclusion?**

16 A. My conclusion is consistent with the rules both EFSEC and the Department of
17 Ecology have adopted under the Greenhouse Gases Emissions statute. These rules
18 define what “designed and intended” means in the definition of the term “baseload
19 electric generation” in RCW 80.80.010(4). According to these rules, “designed
20 means originally specified by the design engineers for the power plant or generating
21 units ... installed at a power plant; and intended means allowed for by the current

1 permits for the power plant, recognizing the capability of the installed equipment or
2 intent of the owner or operator of the power plant.”¹⁴

3 My conclusion is also supported by the context of the statute itself. It is
4 apparent to me from the Greenhouse Gases Emissions statute that any new fossil-
5 fueled baseload electric generation sited in this state in the near term will be a gas-
6 fired combined-cycle combustion turbine. This is because, although other fossil-
7 fueled plants can meet the standard through use of methods such as carbon
8 sequestration, such technologies are not yet available on a large scale project. The
9 Legislature’s mandate that future emissions standards are to be based on combined-
10 cycle combustion turbines for fossil-fueled baseload generation is reflected in the
11 requirement that, every five years, the Washington Department of Commerce
12 (formerly Department of Community, Trade, and Economic Development) establish
13 future greenhouse gases emissions requirements based on natural gas combined-
14 cycle combustion turbine electric generation technology. (RCW 80.80.050).

15 At the same time, combined cycle combustion turbines are a flexible
16 resource. Though they are designed with the technical capability to operate at a very
17 high annualized capacity factor, up to about 85 percent, they often do not actually
18 run at even a 60 percent capacity factor, because in practice, they are economically
19 dispatched. As an example, PacifiCorp’s 2007 IRP estimated a 56% annual capacity
20 factor for new combined-cycle plants in the WCA using the technology present in
21 the Chehalis Plant.

¹⁴ WAC 173-407-110 (Department of Ecology) and WAC 463-85-110 (EFSEC). These rules are worded the same, in part because these agencies were required to jointly develop these rules.

1 All of this suggests to me that the Legislature was primarily looking to the
2 plant's technical capabilities and permit limits in establishing the definition of
3 baseload generation, and less on the actual intent of the owner or operator.
4

5 *1. Design of the Chehalis Plant*
6

7 **Q. Was the Chehalis Plant designed to operate at a capacity factor of at least 60**
8 **percent?**

9 A. Yes. The engineers who designed the Chehalis Plant specified the equipment to be a
10 baseload combined-cycle power plant. The turbines installed at the Chehalis Plant
11 are 'F' series General Electric combustion turbines with a matched steam turbine.
12 According to the manufacturer's specifications, this equipment has the capability to
13 routinely meet and exceed a 60% annualized plant capacity factor. This is also
14 supported by PacifiCorp's estimated ~~XXX~~ percent plant availability factor (i.e., the
15 percent of time the plant can operate, after accounting for outages). (Exhibit No. ____
16 (GND-3C), page 1, last column, second to last comment).

17 The design of the Plant to operate at or above a 60 percent capacity factor is
18 also reflected in the Plant's original maintenance service contract, entitled
19 "Contractual Services Agreement," which called for the Plant to be operated at least
20 ~~XXXXXX~~ hours per year.

21 Later, the former owner physically modified the Plant to make it capable of
22 operating in a wider range, and the service contract was changed to reflect this
23 enhanced operating flexibility. The Plant has not been further modified since

1 PacifiCorp purchased the plant and the current contractual services agreement allows
2 annual operations between ~~XX%~~ and ~~XX%~~ of nameplate capacity. These Plant
3 modifications do not lessen the ability of the plant to run at or above 60% annualized
4 capacity factor in any given year. In fact, the annualized plant capacity factor could
5 actually be higher because the Plant will be able to produce energy under more
6 diverse scenarios.

7
8 **Q. Has PacifiCorp, as the new owner, changed anything at the Chehalis Plant that**
9 **would materially affect the Plant's capabilities?**

10 A. No. In addition to retaining the same equipment, PacifiCorp retained the same
11 arrangements as the prior owner for plant maintenance, gas supply, and electric
12 transmission. I discuss these arrangements later.

13
14 *2. Intended Use Based on Necessary Permits*

15
16 **Q. What does the relevant permit or other similar documents indicate regarding**
17 **the issue of baseload electric generation?**

18 A. The Chehalis Plant must meet state and federal requirements for air quality. The
19 relevant permits are combined under EFSEC authority in a document called the Site
20 Certification Agreement (SCA). EFSEC last revised the SCA in September 2008,
21 following the sale of the Chehalis Plant to PacifiCorp. The SCA imposes conditions
22 on how many hours it may take the Plant to start up (i.e., reach 60% of generating
23 capacity) from a cold start or warm start, and how many hours it is allowed to take to

1 shut down, plus other conditions of operation. Importantly, the SCA places no
2 restrictions on the maximum number of hours per year the Plant can operate.

3 EFSEC also issues an annual certification determining whether the Chehalis
4 Plant is in compliance with the Greenhouse Gases Emissions Performance Standard.
5 The most recent certification letter is my Exhibit ___ (DN-2). In that letter, EFSEC
6 indicates that the Chehalis Plant is subject to RCW 80.80.040 as a “baseload
7 electrical generating” facility.

8
9 *3. Intended Use Based on Other Relevant Factors*

10
11 **Q. Are there other factors you recommend the Commission consider when**
12 **determining whether the Chehalis Plant qualifies as “baseload electric**
13 **generation?”**

14 **A.** Yes. PacifiCorp has sufficient firm gas supply and gas transportation arrangements
15 to operate the Centralia Plant at or above a 60 percent capacity factor, and the
16 Company has sufficient long-term electric transmission contracts with BPA that
17 exceed the rated generating capacity of the Chehalis Plant. I base these conclusions
18 on my review of the actual contracts, and other relevant documents.

19 Also, the Company’s RFP that was issued shortly before the Company
20 acquired the Chehalis Plant described the need for large combined cycle combustion
21 turbines as “baseload/intermediate load” plants. However, the RFP did not define
22 “baseload” and “intermediate load,” nor did it prescribe a capacity factor. The
23 decision making document PacifiCorp prepared to evaluate the financial benefit of

1 the Chehalis Plant to the Company and its customers used projected capacity factors
2 ranging from XX% to XX%, which approaches the 60% capacity factor level. In its
3 discussion, the Company observed that the “XXXXXXXXXXXXXXXXXXXXXXXXXXXX
4 XXX
5 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.” (Emphasis added).

6
7 **Q. What do you conclude from this evidence on the “design and intent” of the**
8 **Chehalis Plant?**

9 A. The Chehalis Plant is designed and permitted to operate at or above a 60 percent
10 annualized plant capacity factor, though PacifiCorp anticipates operating the Plant on
11 average at somewhat lower levels. In summary, I conclude that the Chehalis Plant
12 qualifies as “baseload electric generation” for purposes of the Greenhouse Gases
13 Emissions statute. Therefore, PacifiCorp was justified in deferring costs associated
14 with that Plant, as permitted by the statute.

15
16 **V. CONCLUSION**

17
18 **Q. What conclusions do you reach based on your analysis?**

19 A. Based on the direct testimony of PacifiCorp and the additional evidence I supply in
20 my testimony, there is sufficient support for the requested findings in the Settlement
21 Stipulation that the Company was prudent in acquiring the Chehalis Plant and
22 Marengo II, and these facilities are used and useful for service in Washington, as

1 well as the finding that the Company was justified in deferring costs related to the
2 Chehalis Plant.

3

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

5 **A. Yes.**

6

7