

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

In the Matter of PacifiCorp, dba)	
Pacific Power)	Docket No. UE-245
2013 Transition Adjustment)	
Mechanism)	

Reply Testimony of Kevin C. Higgins

on behalf of

Noble Americas Energy Solutions LLC

June 6, 2012

REPLY TESTIMONY OF KEVIN C. HIGGINS

Introduction

Q. Please state your name and business address.

A. Kevin C. Higgins, 215 South State Street, Suite 200, Salt Lake City, Utah,
84111.

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

A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies
is a private consulting firm specializing in economic and policy analysis
applicable to energy production, transportation, and consumption.

Q. On whose behalf are you testifying in this phase of the proceeding?

A. My testimony is being sponsored by Noble Americas Energy Solutions
("Noble Solutions"), formerly Sempra Energy Solutions LLC. Noble Solutions is
a retail energy supplier that serves commercial and industrial end-use customers
in 16 states, the District of Columbia, and Baja California, Mexico. Noble
Americas serves more than 15,000 retail customer sites nationwide, with an
aggregate load in excess of 4,500 MW. Noble Solutions' retail customers are
located in the service territories of 55 utilities. In Oregon, Noble Solutions is
currently serving customers in Portland General Electric's service territory and
PacifiCorp's territory.

Q. Please describe your professional experience and qualifications.

A. My academic background is in economics, and I have completed all
coursework and field examinations toward a Ph.D. in Economics at the University

1 of Utah. In addition, I have served on the adjunct faculties of both the University
2 of Utah and Westminster College, where I taught undergraduate and graduate
3 courses in economics. I joined Energy Strategies in 1995, where I assist private
4 and public sector clients in the areas of energy-related economic and policy
5 analysis, including evaluation of electric and gas utility rate matters.

6 Prior to joining Energy Strategies, I held policy positions in state and local
7 government. From 1983 to 1990, I was economist, then assistant director, for the
8 Utah Energy Office, where I helped develop and implement state energy policy.
9 From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County
10 Commission, where I was responsible for development and implementation of a
11 broad spectrum of public policy at the local government level.

12 **Q. Have you ever testified before this Commission?**

13 A. Yes. I have testified in several prior proceedings in Oregon, including the
14 four previous PacifiCorp Transition Adjustment Mechanism (“TAM”) cases, UE-
15 227 (2012 TAM), UE-216 (2011 TAM), UE-207 (2010 TAM), and UE-199 (2009
16 TAM). I have also participated in four PacifiCorp general rate cases, UE-210
17 (2009), UE-179 (2006), UE-170 (2005), and UE-147 (2003). In addition, I have
18 testified in three Portland General Electric (“PGE”) general cases, UE-215 (2010),
19 UE-197 (2008) and UE-180 (2006), as well as in the PGE restructuring
20 proceeding, UE-115 (2001).

21 **Q. Have you participated in any workshop processes sponsored by this**
22 **Commission?**

1 A. Yes. In 2003, I was an active participant in the collaborative process
2 initiated by the Commission to examine direct access issues in Oregon, UM-1081.

3 **Q. Have you testified before utility regulatory commissions in other states?**

4 A. Yes. I have testified in approximately 145 proceedings on the subjects of
5 utility rates and regulatory policy before state utility regulators in Alaska,
6 Arizona, Arkansas, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky,
7 Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York,
8 North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Utah,
9 Virginia, Washington, West Virginia, and Wyoming. I have also prepared
10 affidavits that have been filed with the Federal Energy Regulatory Commission.
11 My statement of qualifications is attached as Noble Solutions Exhibit 101.

12

13 **Overview and Conclusions**

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

15 A. My testimony addresses the calculation of the Schedule 294 and 295
16 transition adjustments.

17 **Q. What are the conclusions and recommendations in your testimony?**

18 A. I support the continued application of the modifications to the calculation
19 of Schedule 294 and 295 transition adjustments provided in Stipulations approved
20 by the Commission in Docket Nos. UE-199, UE-207, and UE-227, with the
21 exception that the credit for the resale of 25 MW of Bonneville Power
22 Administration ("BPA") transmission should be increased from \$0.75 per MWH
23 to \$1.422 per MWH to better reflect the value of this transmission. At a

1 minimum, the modest BPA credits adopted in the UE-227 Stipulation should
2 continue to be applied in the 2013 TAM.

3 PacifiCorp's calculation of sample Schedule 294 and 295 transition
4 adjustments for Schedules 30-Secondary and 48-Primary filed in this docket does
5 not include the BPA credit negotiated in UE-227 (or UE-216), nor does it include
6 the relaxation of the market caps for the calculation of Schedules 294 and 295 that
7 was negotiated and approved in UE-199. These "proposed" changes to the
8 Schedule 294 and 295 transition adjustments were included in the Company's
9 workpapers as part of the required sample Schedule 294 calculation, but neither
10 notice nor explanation was offered by the Company in its filing regarding these
11 proposed changes. Both of these changes are unreasonable and unduly harmful
12 to direct access and should be rejected by the Commission. I recommend that the
13 Commission order PacifiCorp to continue to apply the relaxation of the market
14 cap limitations in the GRID model by 15 MW at Mid-Columbia and 10 MW at
15 COB in the calculation of the Schedule 294 and 295 transition adjustment, as
16 provided in the UE-199 Stipulation approved in Order No. 08-543.

17 Moreover, PacifiCorp's request in this docket to expand the application of
18 market caps to all hours has implications for the Schedule 294 and 295 transition
19 adjustment. To the extent that an expansion of the market caps to all hours is
20 approved by the Commission, the relaxation of the market cap limitations should
21 be extended concomitantly to all hours using the adjustment that was adopted in
22 UE-199 described above.

23

1 **Calculation of the Transition Adjustment (Schedules 294 and 295)**

2 **Q. What is your understanding of the purpose of the transition adjustment?**

3 A. The purpose of the transition adjustment is to provide the appropriate
4 credit or charge for customers who choose direct access service. The transition
5 adjustment is applied either through Schedule 294 or Schedule 295. The former is
6 applied to customers who choose a one-year direct access option, whereas the
7 latter is applied to customers who choose a three-year direct access option.

8 The logical premise behind the transition adjustment is to credit or charge
9 direct access customers the difference between PacifiCorp's net power cost (as
10 reflected in Schedule 201) and the estimated market value of the electricity that is
11 freed up when a customer chooses direct access service. This is calculated by
12 subtracting the former from the latter, after adjusting for line losses measured at
13 the point of retail delivery. If the result is a positive number, the difference is
14 applied as a credit to the direct access customer. If the result is a negative
15 number, the difference is applied as a charge to the direct access customer.

16 The current practice is to calculate the transition adjustment using
17 PacifiCorp's GRID model. According to PacifiCorp's tariff, the estimated market
18 value of the electricity that is freed up when a customer chooses direct access
19 service is determined by running two system simulations – one simulation with
20 PacifiCorp serving the direct access load and one simulation with the Company
21 not serving the direct access load. At the present time, these simulations are run
22 assuming direct access occurs in 25 MW decrements, which are shaped using the
23 load shape of the rate schedule being analyzed for purposes of determining its

1 Schedule 294 or 295 credit (charge). The difference between the two scenarios is
2 used to calculate the impact on PacifiCorp's total system, which is then used to
3 determine the Weighted Market Value of the energy freed up due to direct access.
4 The Weighted Market Value of the energy is then compared to the customer's
5 price under Schedule 201 to determine the Schedule 294 or 295 credit (charge).

6 In each of the last four PacifiCorp TAM proceedings there have been
7 refinements to the calculation of Schedules 294 and 295 that were included in
8 Stipulations approved by the Commission, most recently in Order No. 11-435.

9 **Q. What refinements to the calculation of the Schedule 294 and 295 rates have**
10 **been adopted over the past several TAM proceedings?**

11 A. In UE-199, the Stipulation approved by the Commission in Order No. 08-
12 543 modified the valuation of the energy freed up due to direct access as follows:

13 15. Transition Adjustment: The Parties agree to modify the calculation of
14 the Transition Adjustment for direct access in two ways: (1) the Company
15 will relax the market cap limitations in the GRID model by 15MW at Mid-
16 Columbia and 10MW at COB to determine the value of the freed up
17 power; and (2) any remaining monthly thermal generation that is backed
18 down for assumed direct access load will be priced at the simple monthly
19 average of the COB price, the Mid-Columbia price, and the avoided cost
20 of thermal generation as determined by GRID. The monthly COB and
21 Mid-Columbia prices will be applied to the heavy load hours or light load
22 hours separately. The existing balancing account mechanisms will remain
23 in effect.
24

25 This provision provides an improved measurement of the Weighted Market Value
26 of the energy freed up due to direct access compared to prior measurements – and
27 is particularly important in the context of this current TAM proceeding, as I will
28 discuss below.

1 In UE-207, the Stipulation approved by the Commission in Order No. 09-
2 274 corrected an oversight in the treatment of line losses in the calculation of
3 Schedule 294 and 295 rates. Section 15.c of the UE-207 Stipulation provides
4 that:

5 For purposes of calculating the transition adjustments in Schedules 294
6 and 295, losses will include primary and secondary line losses, as
7 applicable, in addition to the transmission losses already included in the
8 calculation.
9

10 This provision significantly improved the accuracy of the line loss component in
11 the calculation of Schedules 294 and 295.

12 The Stipulation in UE-216, approved in Order No. 10-363, provided for a
13 small Bonneville Power Administration (“BPA”) transmission credit for Schedule
14 747 and 748 (direct access) customers of \$(0.50)/MWh to reflect the potential
15 value associated with reselling BPA Point to Point (“PTP”) wheeling rights from
16 Mid-Columbia to the Company’s Oregon Service territory that are freed up as a
17 result of customers choosing direct access.

18 Finally, the Stipulation in the most recent TAM proceeding, UE-227,
19 approved in Order No. 11-435, increased the BPA transmission credit to
20 \$(0.75)/MWh, pursuant to Section 14 of the Stipulation, which states:

21 14. Bonneville Power Administration (BPA) Transmission Credit for
22 Direct Access. PacifiCorp agrees to increase the Schedule 294 transition
23 adjustment by \$(0.75)/MWh for the 2012 TAM for Schedule 747 and 748
24 customers to reflect the potential value associated with reselling BPA
25 Point-to-Point wheeling rights from Mid-C to the Company's Oregon
26 service territory that are freed-up as a result of customers choosing direct
27 access. Nothing in this agreement obligates PacifiCorp to sell any
28 transmission rights to an electricity service supplier.
29

1 Further, in UE-227, the Parties agreed that the line losses in Schedule 220, which
2 are used in calculating the Schedule 294 and 295 transition adjustments, will be
3 consistent with the Real Power Losses that appear in Schedule 10 of PacifiCorp's
4 Open-Access Transmission Tariff ("OATT") for the PacifiCorp Zone that are
5 approved to be in effect for the test year. This provision ensures comparability
6 between the line losses charged to Electric Service Suppliers ("ESSs") in
7 PacifiCorp's OATT and the line losses used in the calculation of the Schedule 294
8 and 295 transition adjustments.

9 **Q. Has PacifiCorp continued to apply all of the refinements to the TAM**
10 **calculations agreed to in UE-199, UE-207, and UE-227 in performing the**
11 **sample TAM calculations for Schedules 30-Secondary and 48-Primary filed**
12 **in this docket?**

13 A. No. Although the Company has applied several of the refinements
14 approved in previous TAM stipulations, PacifiCorp's sample TAM calculations
15 for Schedules 30-Secondary and 48-Primary filed in this docket do not include the
16 modest BPA credit negotiated in UE-227 (or UE-216), nor do they include the
17 relaxation of the market caps for the calculation of Schedules 294 and 295 that
18 was negotiated and approved in UE-199. Both changes were made without any
19 explanation or notice and should be rejected by the Commission.

20

1 **BPA Credit**

2 **Q. In your opinion, what is the basis for recognizing a BPA credit?**

3 A. Recognition of a BPA credit is necessary to address a structural
4 impediment to the pricing of direct access service associated with the need for an
5 ESS to obtain wheeling from BPA to reach the PacifiCorp service territory from
6 the Mid-Columbia trading hub. This impediment is reasonably mitigated if the
7 calculation of the Schedule 294 and 295 transition adjustments are adjusted to
8 recognize that the direct access load “frees up” BPA transmission capacity that
9 can then be resold to an ESS to reach PacifiCorp’s load.

10 As I discussed above, the transition adjustment is calculated by assuming
11 25 MW of incremental direct access load. In the mechanics of this calculation it
12 is reasonable to recognize that the ESSs serving this load will require 25 MW of
13 BPA transmission, and that PacifiCorp, which in the transition adjustment
14 analysis is assumed to experience a load reduction of 25 MW, will have the
15 opportunity to sell to the ESSs the 25 MW of BPA transmission needed to meet
16 this demand. Irrespective of whether PacifiCorp ultimately chooses to liquidate
17 the BPA transmission capacity, the Company has the opportunity to resell this
18 asset in proportion to the amount of load that elects retail choice.

19 A BPA transmission credit based on this concept has been included in the
20 calculation of transition adjustments for the Portland General service territory for
21 a number of years and the BPA credits recognized in UE-216 and UE-227 for
22 PacifiCorp’s Schedule 747 and 748 customers were small positive steps in this
23 direction.

1 **Q. How much does PacifiCorp pay for BPA transmission from Mid-Columbia?**

2 A. According to PacifiCorp's Response to Noble Solution Data Request 2.2,
3 which I have attached at Noble Solutions Exhibit 102, PacifiCorp owns 636 MW
4 of long-term point-to-point ("PTP") BPA transmission from Mid-Columbia,
5 which is billed at the PTP-12 long-term firm rate of \$1.298/kW-month. At a 100
6 percent load factor, this rate is equivalent to \$1.778/MWH. In addition,
7 PacifiCorp has a network integration agreement with BPA for 497 MW that
8 allows for delivery to various load pockets on BPA's system at the NT-12 base
9 charge of \$1.298/kW/month, plus a load shaping charge of \$0.367/kW-month. At
10 a 100 percent load factor, this rate is equivalent to \$2.28/MWH. The current
11 BPA transmission credit of \$(0.75)/MWH recognized in the 2012 transition
12 adjustment calculation is just 33% to 42% of these values.

13 **Q. What is your recommendation to the Commission on this issue?**

14 A. I recommend that the Schedule 294 and 295 transition adjustment
15 calculations be modified to include a credit for the resale of BPA transmission of
16 \$(1.422)/MWH to reflect a more accurate value of this transmission than the
17 \$(0.75)/MWH approved in UE-227. Even at \$(1.422)/MWH, the valuation is
18 conservative because it is calculated using 80 percent of the PTP rate at a 100
19 percent load factor, the latter representing the minimum per-MWH valuation for a
20 product that is originally priced on a per kW-month basis. Moreover, the PTP
21 rate corresponds to a product that PacifiCorp is free to resell when customers
22 move to direct access. This change would mitigate the structural impediment to

1 the pricing of direct access service by treating the BPA wheeling costs on a
2 comparable basis for direct access and cost-of-service customers.

3 If this recommendation is not adopted, then, at a minimum, the modest
4 BPA credit adopted in the UE-227 Stipulation should continue to be applied in the
5 2013 TAM.

6 **Q. Aside from UE-216 and UE-227, has the issue of a BPA transmission credit**
7 **been addressed previously by the Commission with respect to the PacifiCorp**
8 **TAM?**

9 A. Yes. In Order No. 04-516, issued in UM-1081, proposals by parties to
10 recognize a BPA transmission credit were not adopted by the Commission. At
11 that time (2004), PacifiCorp was contractually precluded from reselling its BPA
12 wheeling rights, and the Commission determined that not recognizing a BPA
13 transmission credit was consistent with the Company's anticipated operational
14 responses to direct access. [Order at 9-12.]

15 At the same time, however, the Commission left the door open to later
16 revisions, stating that:

17 We agree with parties that further revisions may be necessary to implement an
18 accurate and equitable transition adjustment in the long run. We are hopeful,
19 however, that interim transition adjustment revisions will stimulate participation
20 in direct access in PacifiCorp's service territory in the short term and thereby
21 inform the design of further improvements. [Order at 1.]
22

23 **Q. Has participation in direct access in PacifiCorp's service territory been**
24 **stimulated as hoped for in the Order?**

25 A. Not to a significant extent. Participation has improved compared to the
26 complete absence of direct access activity that existed in 2004, but it is still very

1 small relative to the participation levels in the Portland General service territory.
2 For example, according to the Oregon Electric Industry Restructuring Status
3 Report (prepared by the Commission's Electric Rates and Planning section) dated
4 January 2012, only 0.6% of non-residential customer load in the PacifiCorp
5 service territory was participating in direct access service compared to 8.7%
6 participation in the Portland General service territory. (See Noble Solutions
7 Exhibit 103.) While I do not contend that the small size of the BPA transmission
8 credit is solely responsible for the extremely low level of direct access activity in
9 the PacifiCorp service territory, the low participation level indicates that further
10 *increasing* the barriers to participation by reducing the BPA transmission credit to
11 zero, as PacifiCorp has proposed, is not called for and is unreasonable.

12 **Q. Why is it appropriate to revisit the issue of a BPA transmission credit at this**
13 **time?**

14 A. The facts are different today than in 2004 with respect to PacifiCorp's
15 ability to resell BPA wheeling rights. In 2004, PacifiCorp was contractually
16 precluded from reselling its BPA wheeling rights; that is no longer the case.¹
17 PacifiCorp's ability to resell its BPA wheeling rights now makes it is reasonable
18 to assume that an ESS can reach its PacifiCorp customer load from Mid-Columbia
19 by purchasing transmission capacity from PacifiCorp that is freed up by direct
20 access. Recognizing the value of this freed-up transmission as a credit in the
21 Schedule 294 and 295 transition adjustment calculation is a reasonable means to
22 address the continued impediments to direct access service in the PacifiCorp

¹ PacifiCorp Response to Noble Solutions DR 2.6, attached as Noble Solutions Exhibit 104 .

1 service territory within the general framework of the current TAM methodology.
2 As I stated above, a similar credit is applied in the Portland General service
3 territory.
4

5 **Market Caps**

6 **Q. Please describe the issue of market caps as it pertains to the Schedule 294**
7 **and 295 transition adjustment.**

8 A. The market cap issue is discussed by PacifiCorp witness Gregory N.
9 Duvall on pages 17 to 22 of his direct testimony. In calculating net power costs,
10 the GRID model assumes that there are restrictions on the liquidity of power
11 markets. Accordingly, if GRID shows that PacifiCorp has resources available
12 that can earn a margin at market prices, these resources are not dispatched once
13 the assumed restriction, or market cap, is reached. Prior to the 2012 TAM, the
14 market cap was applied only during light-load periods (i.e., the so-called
15 “graveyard” hours); in the 2009 TAM case the parties negotiated a reasonable
16 means to accommodate the graveyard market cap constraint within the calculation
17 of the Schedule 294 and 295 transition adjustment. However, as discussed by
18 Mr. Duvall, PacifiCorp is seeking approval to expand the application of market
19 caps to all hours.

20 The proposal by PacifiCorp to greatly expand the market cap assumptions
21 in GRID is a subject of controversy that I anticipate will be litigated on its merits
22 in this proceeding. Irrespective of whether PacifiCorp’s expanded market cap
23 assumptions are approved by the Commission for normal operation of the GRID

1 model to determine net power costs, it is essential that this restriction be modified
2 for running GRID to determine Schedule 294 and 295 transition adjustments – as
3 was approved by the Commission in UE 199 and applied by PacifiCorp in
4 subsequent TAM proceedings. Specifically, if a given amount of direct access is
5 being assumed in the GRID run, it is reasonable (and necessary) to make a
6 matching assumption that liquidity has been increased in the market hubs by this
7 same amount of direct access megawatt-hours. This is because the direct access
8 load represents an incremental demand for power relative to the market liquidity
9 assumed in the baseline GRID run. Since the direct access decrement in the
10 GRID run represents a change in assumptions from the baseline GRID run,
11 consistency requires that this change be extended to the assumed demand for
12 power in the market hubs on the part of the suppliers seeking to serve the assumed
13 direct access load. Failure to make this conforming change in the market cap
14 assumption results in a systematic understatement of the Schedule 294 and 295
15 transition adjustment credits.

16 **Q. Why will failure to relax the market cap assumption result in a systematic**
17 **understatement of the Schedule 294 and 295 Transition Adjustments?**

18 A. If the market cap assumptions are not relaxed to account for the assumed
19 increase in direct access, then GRID will not sell all the energy freed up by direct
20 access, but will back down lower-priced thermal units – even though the suppliers
21 to the assumed direct access load would be seeking to purchase power from the
22 market to supply these loads, adding to the market for freed-up energy. The
23 substitution of lower-priced thermal generation for market prices would result in a

1 reduction in the calculated value of the Weighted Market Value of freed-up
2 energy, reducing the Schedule 294 and 295 credits (or increasing the charges)
3 paid to direct access customers. Because this reduction is caused by a mismatch in
4 the assumptions used for direct access and market caps, it constitutes an
5 understatement of the Weighted Market Value of freed-up energy, and a
6 consequent understatement of the Schedule 294 and 295 credits (or overstatement
7 of the charges).

8 **Q. What are the consequences of understating the Schedule 294 and 295**
9 **credits?**

10 A. As I discussed above, understating the Schedule 294 and 295 credits, or
11 when Schedule 294 or 295 is a charge, overstating the charge, creates an
12 unwarranted barrier to direct access service.

13 **Q. Have you calculated the adverse impact on the Schedule 294 transition**
14 **adjustment if the market cap is not relaxed?**

15 A. Yes. The adverse impact of failing to relax the market caps for the
16 Schedule 294 transition adjustment is presented in Noble Solutions Exhibit 105
17 for the sample TAM calculations provided by PacifiCorp as part of its filing. The
18 impact ranges from nil in certain months to as much as 0.88 cents per kWh, which
19 is very material.

20 **Q. How was this issue resolved in UE-199?**

21 A. As I discussed above, in UE-199 the Commission approved a Stipulation
22 that required the Company to relax the market cap limitations in the GRID model
23 by 15 MW at Mid-Columbia and 10 MW at COB to determine the value of the

1 freed up power. Together, this adjustment relaxes the market caps at Mid-
2 Columbia and COB by the 25 MW of direct access load that is assumed in the
3 Schedule 294 and 295 transition adjustment calculation. At the time of UE-199,
4 the market caps were applied only during graveyard hours, so the relaxation of the
5 caps occurred only during those hours. However, with the Company's proposed
6 expansion of market caps to all hours, the relaxation of the market cap limitations
7 in the GRID model by 15 MW at Mid-Columbia and 10 MW at COB should also
8 be extended to all hours, to the extent that an expansion of the market caps is
9 approved by the Commission.

10 **Q. In performing the sample Schedule 294 and 295 calculations in this docket,**
11 **did PacifiCorp continue to relax the market caps during graveyard hours as**
12 **approved in UE 191?**

13 A. No. Not only did PacifiCorp not extend the principle of the market cap
14 relaxation to all hours, as the logic of the agreement reached in UE 199 would
15 dictate, the Company has actually taken a significant step backward by failing to
16 apply the market cap relaxation during the graveyard hours as agreed upon for the
17 2009 TAM.

18 **Q. Did PacifiCorp provide any notice or explanation of this change?**

19 A. No. I only discovered the change after conducting a detailed due
20 diligence review of the Company's 2013 TAM workpapers in this case.

21 **Q. What is the appropriate remedy for this problem?**

22 A. The Commission should order PacifiCorp to continue to apply the
23 relaxation of the market cap limitations in the GRID model by 15 MW at Mid-

1 Columbia and 10 MW at COB in the calculation of the Schedule 294 and 295
2 transition adjustment during graveyard hours, as provided in the UE-199
3 Stipulation approved in Order No. 08-543. Then, to the extent that an expansion
4 of the market caps to all hours is approved by the Commission, the relaxation of
5 the market cap limitations should be extended concomitantly to all hours.

6 **Q. Does this conclude your reply testimony?**

7 A. Yes, it does.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

In the Matter of PacifiCorp, dba)	
Pacific Power)	Docket No. UE 245
2013 Transition Adjustment)	
Mechanism)	

Noble Americas Energy Solutions LLC

Exhibit 101

Witness Qualification Statement of Kevin C. Higgins

June 6, 2012

WITNESS QUALIFICATION

STATEMENT NAME: Kevin C. Higgins

EMPLOYER: Energy Strategies, LLC

TITLE: Principal

ADDRESS: 215 South State Street, Suite 200, Salt Lake City, UT 84111

EDUCATION: Ph.D. Candidate, Economics, University of Utah (coursework and field exams completed, 1981)

Bachelor of Science, Education, State University of New York at Plattsburgh, 1976 (cum laude).

EXPERIENCE:

I have served on the adjunct faculties of both the University of Utah and Westminster College, where I taught undergraduate and graduate courses in economics. I joined Energy Strategies in 1995, where I assist private and public sector clients in the areas of energy- related economic and policy analysis, including evaluation of electric and gas utility rate matters.

Prior to joining Energy Strategies, I held policy positions in state and local government. From 1983 to 1990, I was economist, then assistant director, for the Utah Energy Office, where I helped develop and implement state energy policy. From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County Commission, where I was responsible for development and implementation of a broad spectrum of public policy at the local government level.

I have testified in approximately 145 proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Alaska, Arizona, Arkansas, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Virginia, Washington, West Virginia, and Wyoming. I have also prepared affidavits that have been filed with the Federal Energy Regulatory Commission.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

In the Matter of PacifiCorp, dba)	
Pacific Power)	Docket No. UE 245
2013 Transition Adjustment)	
Mechanism)	

Noble Americas Energy Solutions LLC

Exhibit 102

PacifiCorp's Response to Noble Americas

Energy Solutions LLC's Data Request 2.2

June 6, 2012

UE-245/PacifiCorp
May 3, 2012
NAES Data Request 2.2

NAES Data Request 2.2

When PacifiCorp purchases power from Mid Columbia to serve its retail load please:

- (a) identify the amount of capacity wheeled by BPA from Mid-Columbia on PacifiCorp's behalf;
- (b) fully explain the wheeling arrangement(s);
- (c) identify the rate(s) charged for wheeling; and
- (d) provide a copy of the wheeling contract(s), if applicable.

Response to NAES Data Request 2.2

(a) PacifiCorp purchases long-term firm Point-to-Point transmission rights to 636 MW of capacity from Mid-Columbia to its west system loads. PacifiCorp has been allocated long-term firm network transmission rights to 497 MW of capacity from Mid- Columbia to its west system loads.

(b) PacifiCorp utilizes these two types of transmission to transfer surplus Mid-Columbia resources (generation and purchases) to various locations on the PacifiCorp system. The network transmission allows for resources to dynamically match the load in the load pockets it is delivered to.

(c) PacifiCorp is charged under the following rates for the point-to-point rights:

- Rate Schedule PTP-12 Long Term Firm@ \$1.298 per KW-Month with some application of Short Distance Discount to specific contracts (refer to the tables to contract# 11722).
- Rate Schedule ACS-12 SCD Long Term Firm@ \$0.203 per KW-Month

PacifiCorp is charged under the following rates for the network rights:

- Rate Schedule NT-12 Base Charge@ \$1.298 per peak KW per Month
- Rate Schedule NT-12 Load Shaping Charge@ \$0.367 per peak KW per Month
- Rate Schedule ACS-12 SCD NT Long Term Charge@ \$0.203 per peak KW per Month
- Rate Schedule ACS Reg & Frequency Response@ \$0.00013 per KW-Hour
- Rate Schedule ACS EI +Devin Band 1 HLH PAC@ \$0.01468 per KW-Hour
- Rate Schedule ACS EI +Devin Band 1 LLH PAC@ \$0.01216 per KW-Hour
- Rate Schedule ACS EI +Devin Band 2 HLH PAC@ \$0.01762 per KW-Hour
- Rate Schedule ACS EI +Devin Band 2 LLH PAC@ \$0.01456 per KW-Hour
- Rate Schedule GRSP-12 Utility Delivery Charge@ \$1.119 per peak KW per Month

(d) Please refer to Attachment NAES 2.2

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

In the Matter of PacifiCorp, dba)	
Pacific Power)	Docket No. UE 245
2013 Transition Adjustment)	
Mechanism)	

Noble Americas Energy Solutions LLC

Exhibit 103

Oregon Electric Industry Restructuring

Status Report January 2012

June 6, 2012

Status Report

Oregon Electric Industry Restructuring (January, 2012)

Portfolio Options*	PGE	PP&L
Fixed Renewable	12,560	9,992
Renewable Usage	67,922	24,689
Renewable Future****		
Habitat		4,445
Habitat Rider***	8,862	
Time-of-use	2,485	1,655
Eligible Customers	809,172	554,839**

* Available to residential and small nonresidential customers. Customers may, in certain circumstances, choose more than one option.

** As of January 1, 2011.

*** Habitat Rider is available to existing renewable customers only, and should not be included in calculation of total renewable enrollment numbers.

**** Renewable Future was closed to additional enrollments as of June 1, 2007. This program ended December 2011 and customers transitioned to other programs.

Direct Access and Standard Offer Service

Certified Electricity Service Suppliers: 3

Registered Electricity Service Aggregators: 4

Nonresidential Customer Choices (based on load):

	Cost of Service	Market Options	Direct Access
PGE	86.1%	5.2%	8.7%
PP&L	99.2%	0.2%	0.6%

This report reflects prior month results.

**Produced by the Oregon Public Utility
Commission
Electric Rates and Planning
(503) 378-6917**

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

In the Matter of PacifiCorp, dba)	
Pacific Power)	Docket No. UE 245
2013 Transition Adjustment)	
Mechanism)	

Noble Americas Energy Solutions LLC

Exhibit 104

PacifiCorp's Response to Noble Americas

Energy Solutions LLC's Data Request 2.6

June 6, 2012

UE-245/PacifiCorp
May 3, 2012
NAES Data Request 2.6

NAES Data Request 2.6

Please confirm that the re-sale of PacifiCorp wheeling rights on the BPA system from Mid-Columbia and COB is not contractually precluded for point to point transmission service. If incorrect, please provide a detailed explanation of any prohibitions on such re- sales, including all applicable tariffs, contracts, correspondence with BPA, or other evidence supporting PacifiCorp's position that it cannot resell point to point transmission rights.

Response to NAES Data Request 2.6

PacifiCorp is not contractually precluded from re-selling its point-to-point rights from Mid-Columbia. PacifiCorp grandfathered AC Intertie rights from COB do not include provisions for re-sale.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

In the Matter of PacifiCorp, dba)	
Pacific Power)	Docket No. UE 245
2013 Transition Adjustment)	
Mechanism)	

Noble Americas Energy Solutions LLC

Exhibit 105

Impact of Market Cap Limitations on

Schedule 294 Calculations

June 6, 2012

Initial Filing UE-245 Sample 294 Calculations							Sample 294 Calculations per UE-199 Stipulation Methodology (Relaxed COB/MidC Market Caps in all Hours)					Adverse Impact on Schedule 294 Credit from Failure to Apply UE-199 Stipulation				
2013							2013					2013				
30/730 Secondary		48 Primary		748 Primary			30/730 Secondary		48/748 Primary			30/730 Secondary		48/748 Primary		
HLH	LLH	HLH	LLH	HLH	LLH		HLH	LLH	HLH	LLH		HLH	LLH	HLH	LLH	
Jan-13	-1.021	-0.565	-1.130	-0.640	-1.130	-0.640	-1.218	-1.135	-1.340	-1.17		0.20	0.57	0.21	0.53	
Feb-13	-0.942	-0.551	-1.032	-0.618	-1.032	-0.618	-1.075	-0.954	-1.177	-0.98		0.13	0.40	0.14	0.36	
Mar-13	-0.552	-0.380	-0.667	-0.473	-0.667	-0.473	-0.812	-0.831	-0.921	-0.90		0.26	0.45	0.25	0.43	
Apr-13	-0.189	0.037	-0.277	-0.058	-0.277	-0.058	-0.507	-0.719	-0.618	-0.75		0.32	0.76	0.34	0.69	
May-13	0.156	0.375	0.038	0.280	0.038	0.280	0.153	0.293	0.034	0.20		0.00	0.08	0.00	0.08	
Jun-13	0.311	0.488	0.188	0.388	0.188	0.388	0.323	0.490	0.201	0.39		-0.01	0.00	-0.01	0.00	
Jul-13	-0.888	-0.407	-0.990	-0.444	-0.990	-0.444	-0.910	-0.572	-1.012	-0.59		0.02	0.17	0.02	0.14	
Aug-13	-2.058	-0.915	-2.147	-0.957	-2.147	-0.957	-2.086	-1.223	-2.176	-1.23		0.03	0.31	0.03	0.27	
Sep-13	-1.539	-0.726	-1.642	-0.822	-1.642	-0.822	-1.825	-1.468	-1.941	-1.50		0.29	0.74	0.30	0.68	
Oct-13	-1.277	-0.855	-1.389	-0.944	-1.389	-0.944	-1.425	-1.283	-1.541	-1.31		0.15	0.43	0.15	0.37	
Nov-13	-1.224	-0.816	-1.324	-0.878	-1.324	-0.878	-1.606	-1.660	-1.732	-1.66		0.38	0.84	0.41	0.78	
Dec-13	-1.368	-1.079	-1.476	-1.145	-1.476	-1.145	-1.792	-1.961	-1.949	-2.01		0.42	0.88	0.47	0.86	

Notes: Transition Adjustments in cents/kWh

Source: 15-M1 - ORTAM13w_ Transition Adjustment Summary

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on the 6th day of June, 2012, a true and correct copy of the within and foregoing REPLY TESTIMONY OF KEVIN C. HIGGINS ON BEHALF OF NOBLE AMERICAS ENERGY SOLUTIONS, LLC, was served as shown to:

ROBERT JENKS
C CATRIONA MCCrackEN
OPUC DOCKETS
Citizens' Utility Board of Oregon
610 SW Broadway Ste 400
Portland OR 97205
bob@oregoncub.org
catriona@oregoncub.org
dockets@oregoncub.org

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

IRION A SANGER
MELINDA J DAVISON
Davison Van Cleve
333 SW Taylor Ste 400
Portland OR 97204
mail@dvclaw.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

KATHERINE A MCDOWELL
McDowell Rackner & Gibson PC
419 SW 11th Ave Ste 400
Portland OR 97205
katherine@mcd-law.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

SARAH WALLACE
Pacific Power
825 NE Multnomah St Ste 1800
Portland OR 97232
sarah.wallace@pacificcorp.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

OREGON DOCKETS
PacifiCorp, dba Pacific Power
825 NE Multnomah St Ste 2000
Portland OR 97232
oregondockets@pacificcorp.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

DONALD W SCHOENBECK
Regulatory & Cogeneration Services Inc
900 Washington St Ste 780
Vancouver WA 98660-3455
dws@r-c-s-inc.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

STEVE SCHUE
Public Utility Commission of Oregon
PO Box 2148
Salem OR 97308-2148
steve.schue@state.or.us

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

JASON W JONES
PUC Staff – Department of Justice
1162 Court St NE
Salem OR 97301-4096
jason.w.jones@state.or.us

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

KEVIN HIGGINS
Energy Strategies LLC
215 State St Ste 200
Salt Lake City UT 84111-2322
khiggins@energystrat.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

GREG BASS
Noble Americas Energy Solutions LLC
401 West A Street Ste 500
San Diego CA 92101
gbass@noblesolutions.com

☐ Hand Delivery
☐ U.S. Mail, postage pre-paid
☐ Facsimile
☒ Electronic Mail

Signed 
Nina M Curtis