

Davison Van Cleve PC

TEL (503) 241-7242 • FAX (503) 241-8160 • mail@dvclaw.com

Suite 400
333 SW Taylor
Portland, OR 97204

June 23, 2014

Via E-mail and Federal Express

Public Utility Commission of Oregon
Attn: Filing Center
3930 Fairview Industrial Drive SE
Salem OR 97302

Re: PACIFICORP dba PACIFIC POWER
Application for Approval of Deferred Accounting and Prudence Determination
Associated with the Energy Imbalance Market
Docket No. UM 1689

Dear Filing Center:

Enclosed for filing in the above-referenced docket, please find the original and five (5) copies of the Opening Testimony of Bradley G. Mullins on behalf of the Industrial Customers of Northwest Utilities.

Thank you for your assistance. If you have any questions, please do not hesitate to contact our office.

Sincerely,



Jesse O. Gorsuch

Enclosures

cc: Service List

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the attached **Opening Testimony of Bradley G. Mullins on behalf of the Industrial Customers of Northwest Utilities** upon all parties in this proceeding by causing a copy to be sent via electronic mail to the following parties at the following addresses.

Dated at Portland, Oregon, this 23rd day of June, 2014.



Jesse O. Gorsuch

(W) CITIZENS' UTILITY BOARD OF OREGON

OPUC DOCKETS
ROBERT JENKS
G. CATRIONA MCCRACKEN
610 SW BROADWAY, STE 400
PORTLAND OR 97205
dockets@oregoncub.org
bob@oregoncub.org
catriona@oregon.org

(W) MCDOWELL RACKNER & GIBSON PC

KATHERINE MCDOWELL
419 SW 11TH AVE., SUITE 400
PORTLAND, OR 97205
katherine@mcd-law.com

(W) PACIFIC POWER

SARAH WALLACE
825 NE MULTNOMAH ST, STE 1800
PORTLAND, OR 97232
sarah.wallace@pacificcorp.com

(W) PUC STAFF – DEPARTMENT OF JUSTICE

MICHAEL T. WEIRICH
BUSINESS ACTIVITIES SECTION
1162 COURT ST NE
SALEM, OR 97301-4796
michael.weirich@state.or.us

(W) PUBLIC UTILITY COMMISSION OF OREGON

JOHN CRIDER
DEBORAH GARCIA
PO BOX 1088
SALEM OR 97308-1088
john.crider@state.or.us
deborah.garcia@state.or.us

(W) PORTLAND GENERAL ELECTRIC

DONALD LIGHT – 1WTC1711
JAY TINKER – 1WTC-0702
121 SW SALMON ST
PORTLAND, OR 97204

**(W) PACIFIC POWER, dba PACIFIC
POWER**

OREGON DOCKETS
825 NE MULTNOMAH ST, STE 2000
PORTLAND, OR 97232
oregondockets@pacificorp.com

donald.light@pgn.com
pge.opuc.filings@pgn.com

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1689

In the Matter of)
)
PACIFICORP d/b/a PACIFIC POWER)
)
Application for Approval of Deferred)
Accounting and Prudence Determination)
Associated with the Energy Imbalance Market)
_____)

**OPENING TESTIMONY OF BRADLEY G. MULLINS ON BEHALF OF
THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES**

June 23, 2014

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Bradley G. Mullins, and my business address is 333 SW Taylor Street, Suite
4 400, Portland, Oregon 97204.

5 **Q. PLEASE STATE YOUR OCCUPATION AND ON WHOSE BEHALF YOU ARE**
6 **TESTIFYING.**

7 A. I am an independent consultant representing industrial customers throughout the western
8 United States. I am appearing on behalf of the Industrial Customers of Northwest
9 Utilities (“ICNU”), a non-profit trade association whose members are large customers
10 served by electric utilities throughout the Pacific Northwest, including PacifiCorp, dba
11 Pacific Power (the “Company”).

12 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.**

13 A. I received Bachelor of Science degrees in Finance and in Accounting from the University
14 of Utah. I also received a Master of Science degree in Accounting from the University of
15 Utah. After receiving my Master of Science degree, I worked at Deloitte Tax, LLP,
16 where I was a Tax Senior providing tax consulting services to multi-national corporations
17 and investment fund clients. Subsequently, I worked at PacifiCorp Energy as an analyst
18 involved in regulatory matters primarily related to power supply costs. I began
19 performing independent consulting services in September 2013. A further description of
20 my educational background and work experience can be found in Exhibit ICNU/101.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 A. The purpose of my testimony is to respond to the Company's Application for Deferred
3 Accounting and Prudence Determination Associated with the Energy Imbalance Market
4 ("EIM"), filed on April 18, 2014 ("Company Application").

5 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

6 A. I recommend that the Commission deny the Company's request to defer costs associated
7 with the EIM unless the associated benefits are included in base net power costs ("NPC")
8 through the Company's 2015 Transition Adjustment Mechanism ("TAM"). Without
9 these benefits, the Company's proposal does not match appropriately the costs and
10 benefits of the EIM. Additionally, even if the benefits of the EIM are reflected in the
11 TAM, the Company should not be allowed to defer: (1) capital expenditures, because
12 they will be recoverable in rates later, and because they are not "identifiable utility
13 expenses or revenues"- eligible for deferral under ORS § 757.259(2)(e); (2) costs that are
14 otherwise subject to recovery under the Company's formula transmission rates; and (3)
15 any costs incurred before January 1, 2015, when a base level of EIM benefits would first
16 be included in the TAM. Finally, I recommend that the Commission not issue an order to
17 pre-approve the prudence of the Company's decision to join – and, consequently, the
18 prudence of all costs associated with – the EIM.

19 **II. DEFERRAL OF EIM COSTS**

20 **Q. ON WHAT BASIS IS THE COMPANY SEEKING TO DEFER EIM COSTS?**

21 A. The Company bases its application on ORS § 757.259(2)(e), which permits deferral of
22 "identifiable utility expenses or revenues" for three purposes: 1) "to minimize the
23 frequency of rate changes;" 2) to minimize "the fluctuation of rate levels;" or 3) "to

1 match appropriately the costs borne by and the benefits received by ratepayers.”^{1/} In its
2 application, the Company has requested deferral of approximately \$1.4 million of
3 operating expenses and approximately \$4.0 million of capital expenditures.^{2/} This level
4 of operating expense represents only 0.16% of the revenue requirement approved in the
5 Company’s last general rate case, Docket No. UE 263.^{3/} The identified capital
6 expenditures represent only 0.12% of the rate base approved in Docket No. UE 263.^{4/}
7 Because these expenditures represent a non-material portion of the Company’s rates, the
8 purpose of the application for deferred accounting cannot be characterized as minimizing
9 the frequency of rate changes or fluctuations in rate levels. Rather, as the Company
10 indicates in its filing, the justification for its application is “to match appropriately the
11 costs borne by and benefits received by customers.”^{5/}

12 **Q. DOES THE COMPANY’S DEFERRED ACCOUNTING PROPOSAL**
13 **APPROPRIATELY MATCH THE COSTS BORNE BY AND BENEFITS**
14 **RECEIVED BY RATEPAYERS?**

15 A. No. The Company did not include any benefits associated with the EIM in its 2015 TAM
16 filing or in its deferred accounting proposal.^{6/} While the Company’s filing in this docket
17 indicates that it may, in the future, “convene a collaborative process ... to explore the
18 development of a balancing account to reflect the variable costs and benefits of [the] EIM
19 in rates,”^{7/} at this time no regulatory mechanism exists for ratepayers to receive the

^{1/} ORS § 757.259(2)(e).

^{2/} Company Application at 5:17-6:26. Both values are stated on an Oregon-allocated basis. The operating expense figure includes both \$1.0 million in start-up operating expense and \$0.4 million in annual operating expense.

^{3/} In re PacifiCorp, d/b/a Pacific Power, Request for a General Rate Revision, Docket No. UE 263, Order No. 13-474, Appendix A at 19 (Dec. 18, 2013). Stipulated revenue requirement was \$879.1 million and stipulated rate base was \$3.3 billion.

^{4/} Id.

^{5/} Company Application at 5:8-9.

^{6/} Docket No. UE 287, PAC/100 at 4:17-19.

^{7/} Company Application at 2:8-10.

1 benefits associated with the EIM. No collaborative process has begun; the Company has
2 put forth no proposal for how to reflect EIM benefits in rates; and there is no indication
3 as to whether the proposed “collaborative process,” when it does begin, will result in an
4 agreement before an order in this docket is scheduled to be issued, on October 1, 2014.
5 The Company’s current position in both the TAM docket and this docket will cause
6 customers to incur the costs associated with the EIM without receiving any of the
7 associated benefits. Instead, the benefits will be retained by the Company and its
8 shareholders. This is inconsistent with the matching principle required under ORS §
9 757.259(2)(e) to justify an application for deferred accounting and the Company’s stated
10 purpose for filing this Application.

11 **Q. IS A SEPARATE ADJUSTMENT MECHANISM, LIKE THE COMPANY-**
12 **PROPOSED BALANCING ACCOUNT, NECESSARY TO PASS EIM BENEFITS**
13 **ON TO CUSTOMERS?**

14 A. No. Regulatory mechanisms already exist to pass EIM benefits on to customers. Had the
15 Company not excluded them, the NPC benefits associated with the EIM ordinarily would
16 be subject to the Company’s TAM and trued up annually through its PCAM.

17 **Q. IS IT REASONABLE TO SEPARATELY TRACK EIM COSTS AND BENEFITS?**

18 A. No. There are a number of concerning issues with attempting to “carve out” actual EIM
19 benefits from the TAM and PCAM. Foremost, the Company has not demonstrated that it
20 will be possible to calculate, in retrospect, the NPC benefits associated with the EIM in
21 actual operations. For example, the Company has not demonstrated how the value of
22 reserve savings, which can only be estimated using modeling techniques, and the value of
23 improved intra-regional dispatch, which reflects overall improvements in how the system
24 will operate, can be calculated in actual operations. There is reason to be concerned that

1 a proposed EIM balancing account would result in a controversial proceeding where
2 complex modeling methodologies must be reviewed annually by parties to ensure that the
3 full amount of benefits are reflected in rates.

4 These problems can be avoided if the Company includes projected EIM benefits
5 in the TAM, subject to true-up in the PCAM. Because the PCAM is calculated on a
6 system-wide basis, it will not be necessary to perform any modeling calculations in order
7 to estimate the benefits associated with the EIM.

8 **Q. WHAT RECOMMENDATION HAVE YOU MADE REGARDING EIM**
9 **BENEFITS IN THE 2015 TAM?**

10 A. In my TAM testimony, I recommend that EIM benefits be included in the 2015 test
11 period based on a study performed by Energy & Environmental Economics, Inc. (“E3”).^{8/}
12 This is the same study that the Company relies on to demonstrate that its decision to join
13 the EIM was prudent.^{9/}

14 **Q. IF THE COMMISSION ADOPTS YOUR RECOMMENDATION, SHOULD THE**
15 **COMPANY BE GRANTED DEFERRED ACCOUNTING FOR ALL OF THE**
16 **COSTS DETAILED IN ITS APPLICATION?**

17 A. No. I do not believe a deferred account should be approved for capital expenditures or
18 for expenses that are otherwise subject to recovery through the Company’s formula
19 transmission rates. In addition, a deferred account should not accrue EIM operating
20 expenses incurred prior to January 1, 2015, the date that EIM benefits would first begin
21 to accrue to ratepayers pursuant to my proposal in the TAM.

^{8/} The relevant excerpt of my 2015 TAM testimony is attached as Exhibit ICNU/102. The E3 study was included with the Company’s filing in this docket at PAC/104.

^{9/} PAC/100 at 16:11-18

1 **Q. WHAT IS THE COMPANY'S PROPOSAL FOR DEFERRING CAPITAL**
2 **COSTS?**

3 A. The Company has proposed to defer the return on, and return of, these capital costs.^{10/}
4 However, the Company Application provides no estimate of the amount of these items in
5 the 12 months subsequent to its application, and provides no details about how the
6 Company might account for them. For instance, the Company has not provided its
7 assumptions, such as rate of return or asset lives, that might be used to calculate a
8 potential return on, and return of, these capital expenditures. Absent these details, which
9 are required under OAR § 860-027-0300(3), parties have no basis to evaluate whether it
10 is reasonable to include in a deferred account a potential return on, and return of, capital
11 expenditures associated with the EIM.

12 **Q. WHY SHOULD CAPITAL EXPENDITURES BE EXCLUDED FROM A**
13 **DEFERRED ACCOUNT?**

14 A. Under ORS § 757.259(2)(e), only “identifiable utility *expenses or revenues*” qualify for
15 deferred accounting. A similar requirement is found in OAR § 860-027-0300(1)(b)(A).^{11/}
16 A capital expenditure is neither an expense nor a revenue. A capital expenditure is a cash
17 outflow made to acquire an asset, which will remain on the Company’s balance sheet and
18 be included in rate base, subject to amortization, in the Company’s rate filings. Thus,
19 depending on how the Company intends to account for EIM capital costs, it may result in
20 the double-counting of certain costs, such as amortization expenses, which the Company
21 will have the opportunity to include in rates in its next general rate proceeding, regardless
22 of this deferred accounting application. Therefore, not only do capital expenditures
23 arguably not meet the statutory and regulatory requirements for deferrals, it is also not

^{10/} Company Application at 7:14-16.

^{11/} OAR § 860-027-0300(1)(b)(A) (deferred accounting eligible for “a current expense or revenue associated with current service, as allowed by ORS 757.259”).

1 necessary for the Commission to enter an accounting order to defer any capital
2 expenditures associated with the EIM because they will be eligible for recovery later.

3 **Q. WILL THE COMPANY RECOVER CERTAIN EIM COSTS THROUGH ITS**
4 **FORMULA TRANSMISSION RATES?**

5 A. Yes. On March 25, 2014, the Company filed revisions to its Open Access Transmission
6 Tariff (“OATT”) with the Federal Energy Regulatory Commission (“FERC”) in order to
7 implement the EIM.^{12/} In that filing, the Company stated that EIM capital and operations
8 and maintenance expenses will be recovered through formula transmission rates.^{13/} In its
9 June 2014 annual update, for example, the Company has stated that it included \$952,277
10 of EIM costs in its formula transmission rates.^{14/}

11 **Q. WHY SHOULD THE COMPANY NOT BE PERMITTED TO DEFER COSTS**
12 **ASSOCIATED WITH THE EIM THAT ARE OTHERWISE SUBJECT TO**
13 **RECOVERY THROUGH FORMULA TRANSMISSION RATES?**

14 A. A portion of the costs included in formula transmission rates are recovered from
15 transmission customers. Thus, if the Company is allowed to defer EIM costs already
16 included in formula transmission rates, it will recover the same costs from both
17 transmission and retail customers.

18 **Q. WHY SHOULD OPERATING EXPENSES INCURRED PRIOR TO JANUARY 1,**
19 **2015, BE EXCLUDED FROM THE DEFERRAL?**

20 A. If my proposal in the TAM is adopted, no benefits associated with the EIM will accrue to
21 ratepayers prior to January 1, 2015. It follows that, under the matching principle
22 discussed above, no operating costs associated with EIM operations should be deferred
23 prior to the date that the associated benefits are reflected in rates.

^{12/} FERC Docket No. ER14-1578, PacifiCorp Filing for Revisions to the OATT to Implement the Energy Imbalance Market (Mar. 25, 2014).

^{13/} Id. at 18 n.27-28.

^{14/} Exhibit ICNU/103 at 2 (Company Resp. to ICNU DR 1.21).

1 **III. PRUDENCE DETERMINATION**

2 **Q. DO YOU AGREE WITH THE COMPANY THAT IT IS NECESSARY FOR THE**
3 **COMMISSION TO PRE-APPROVE THE PRUDENCE OF THE COMPANY'S**
4 **DECISION TO JOIN THE EIM AT THIS TIME?**

5 A. No. The Company's justification for seeking a prudence determination now is that the
6 EIM "is a significant undertaking" and that the Company's decision "to participate in the
7 EIM is the first of its kind for a utility in the West."^{15/} While these statements may be
8 true, they do not provide a convincing rationale for granting pre-approval of the
9 Company's decision to participate in the EIM. This case is not like the ones the
10 Company cites in its Application. In Docket Nos. UM 1520 and UG 204, the
11 Commission was asked to make a finding of prudence related to a contract between
12 Northwest Natural Gas Company ("NW Natural") and a third party to develop gas
13 reserves for NW Natural's customers. The contract was "specifically conditioned upon
14 NW Natural receiving Commission approval, including a finding of prudence."^{16/} The
15 Company does not need the Commission to make a prudence determination as a pre-
16 requisite for it to join the EIM. Further, as the Company notes, the Commission's review
17 of the Klamath Hydroelectric Settlement Agreement in UE 219 was required by statute.^{17/}
18 No similar requirement exists here. Simply put, the Commission does not have enough
19 information at this time to make a prudency determination.

20 Furthermore, even if the Commission made a prudence determination, it is
21 difficult to understand what the effect of that determination would be. Under the
22 Company's Implementation Agreement with the Cal-ISO, it can change its mind at any

^{15/} Company Application at 10:17-21.

^{16/} Id. at 9:14-21; In re Northwest Natural Gas Co., Docket Nos. UM 1520 & UG 204, Order No. 11-140, App. A at 3 (Apr. 28, 2011).

^{17/} Company Application at 10:1-7; In re PacifiCorp, Docket No. UE 219, Order No. 10-364 (Sept. 16, 2010).

1 time and decide not to go forward with the EIM. All that is required is 30-days' notice.^{18/}
2 After the Company officially joins the EIM, on October 1, 2014, it can leave with 180
3 days' notice.^{19/} Even if the Company made a prudent decision to sign the
4 Implementation Agreement with the Cal-ISO, subsequent events may make the
5 Company's continued participation in the EIM imprudent. If, in its prudence request, the
6 Company is seeking indemnification against all future claims of imprudence related to its
7 participation in the EIM, this does not fit with how the EIM is structured, which allows
8 voluntary participation and withdrawal.

9 **Q WHEN SHOULD THE COMMISSION EVALUATE THE PRUDENCE OF THE**
10 **COSTS RELATED TO THE COMPANY'S DECISION TO JOIN THE EIM?**

11 A. The prudence of the EIM costs and benefits should be evaluated only when those costs
12 and benefits are sought to be included in rates. Pre-approving the prudence of the
13 Company's decision now will prohibit parties from performing an investigation of the
14 prudence in a later proceeding when all of the facts surrounding the Company's decision
15 to join and implement the EIM have been established. At this point, many of the costs
16 that the Company is seeking to defer have not yet been incurred. Because parties will not
17 have had an opportunity to evaluate these costs prior to the Commission's determination
18 in this proceeding, it would be inappropriate to foreclose parties from evaluating the
19 prudence of those actual costs in later proceedings, when the actual cost data becomes
20 available.

^{18/} PAC/102 at 14.

^{19/} FERC Docket No. ER14-1386, California Independent System Operator Corporation ISO Tariff
Amendments to Implement an Energy Imbalance Market, at 12-13 (Feb. 28, 2014).

1 **Q. IF THE COMMISSION WERE TO MAKE A PRUDENCY DETERMINATION IN**
2 **THIS PROCEEDING, DO YOU HAVE ANY CONCERNS ABOUT THE**
3 **COMPANY'S DECISION TO PARTICIPATE IN THE EIM?**

4 A. Based on the Company's assertions in the TAM that the benefits associated with the EIM
5 are too uncertain to be included in rates,^{20/} it appears that the Company is not yet certain
6 whether the EIM will actually produce benefits for ratepayers. To the extent that the
7 Company decided to join the EIM without assurance that ratepayers would benefit as a
8 result, this is evidence of imprudence. The only information that the Company has
9 provided to demonstrate the prudence of its decision to join the EIM is the E3 study. If
10 the Company believes that the results of the E3 study are too speculative to include in
11 rates, it should not have relied on that study to join the EIM. However, if the Company
12 agrees to pass through to customers an acceptable amount of EIM benefits, such as I
13 proposed in my TAM testimony, this would indicate that the Company's reliance on the
14 E3 study to join the EIM was prudent.

15 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION.**

16 A. I recommend that the Commission deny the Company's request for deferred accounting
17 and prudence determination related to the EIM. In addition, the Commission should not
18 make any prudence determination related to the EIM, until the costs and benefits to
19 customers are known.

20 **Q. DOES THIS CONCLUDE YOUR OPENING TESTIMONY?**

21 A. Yes.

^{20/} Docket No. UE 287, PAC/100 at 4:17-19.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1689

In the Matter of)
)
PACIFICORP d/b/a PACIFIC POWER)
)
Application for Approval of Deferred)
Accounting and Prudence Determination)
Associated with the Energy Imbalance Market)
_____)

EXHIBIT ICNU/101

QUALIFICATIONS OF BRADLEY G. MULLINS

June 23, 2014

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** Bradley G. Mullins. My business address is 333 S.W. Taylor Street, Suite 400, Portland,
3 OR 97204.

4 **Q. PLEASE STATE YOUR OCCUPATION.**

5 **A.** I am an independent consultant representing industrial customers throughout the western
6 United States.

7 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.**

8 **A.** I received Bachelor of Science degrees in Finance and in Accounting from the University
9 of Utah. I also received a Master of Science degree in Accounting from the University of
10 Utah. After receiving my Master of Science degree, I worked at Deloitte Tax, LLP,
11 where I was a Tax Senior providing tax consulting services to multi-national corporations
12 and investment fund clients. Subsequently, I worked at PacifiCorp Energy as an analyst
13 involved in regulatory matters primarily involving power supply costs. I began
14 performing independent consulting services in September 2013 and have been engaged
15 with industrial organizations located throughout the western United States, including
16 regulatory proceedings in Oregon, Washington and Wyoming. In Oregon, I am engaged
17 to testify on behalf of ICNU before the Oregon Public Utility Commission in ongoing
18 rate proceedings with Portland General Electric and PacifiCorp. In Washington, I am
19 engaged to testify on behalf of ICNU before the Washington Utilities and Transportation
20 Commission in the general rate proceeding of Avista. In Wyoming, I am engaged to
21 provide non-testifying services related to various matters before the Wyoming Public
22 Service Commission.

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1689

In the Matter of)
)
PACIFICORP d/b/a PACIFIC POWER)
)
Application for Approval of Deferred)
Accounting and Prudence Determination)
Associated with the Energy Imbalance Market)
_____)

EXHIBIT ICNU/102

EXCERPT OF OPENING TESTIMONY OF BRADLEY G. MULLINS

IN DOCKET NO. UE 287

June 23, 2014

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UE 287

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER)
)
2015 Transition Adjustment Mechanism)
_____)

**REDACTED OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES**

June 19, 2014

1 **II. ENERGY IMBALANCE MARKET BENEFITS**

2 **Q. PLEASE PROVIDE AN OVERVIEW OF YOUR RECOMMENDATION**
3 **RELATED TO EIM BENEFITS.**

4 A. The Company has proposed to exclude any NPC benefits associated with the EIM in this
5 proceeding as a result of alleged uncertainty surrounding the level of benefits that will be
6 achieved in the test period.^{1/} Rather, the Company, through Docket UM 1689, has stated
7 that it plans to make a separate filing in the coming months to explore a potential
8 balancing account to reflect EIM benefits in rates.^{2/} I disagree that it is necessary to
9 create a separate balancing account to reflect EIM benefits when those benefits would
10 otherwise be subject to the Company’s Power Cost Adjustment Mechanism (“PCAM”).
11 Notwithstanding, the NPC in this proceeding should reflect a base level of EIM benefits,
12 regardless of whether a new mechanism is adopted in another proceeding.

13 **Q. WHY IS THE UNCERTAINTY ASSOCIATED WITH EIM BENEFITS NOT A**
14 **LEGITIMATE REASON TO EXCLUDE THEM FROM THE TAM?**

15 A. The Company’s power cost forecasts reflect many uncertain elements. Natural gas
16 prices, electricity prices, loads, outages, hydro output and wind integration are all
17 uncertain elements that the Company attempts to quantify in order to develop a
18 reasonable estimate of forward power costs. As an example, the Company has gone to
19 great analytical lengths to demonstrate the uncertain costs associated with wind
20 integration, yet it has not indicated why it cannot go to similar lengths to estimate the
21 added benefits of the EIM.

^{1/} PAC/100 at 4:15-21.

^{2/} In the Matter of PacifiCorp d/b/a Pacific Power Application for Approval of Deferred Accounting and Prudence Determination Associated with the Energy Imbalance Market, Docket No. UM 1689, “Application for Deferred Accounting and Prudence Determination” (“Company EIM Application”) at 2:8-15 (Apr. 18, 2014).

1 **Q. HOW DOES THE COMPANY PROPOSE TO REFLECT EIM BENEFITS IN**
2 **RATES?**

3 A. The Company’s filing states that it intends to file a “proposal to defer the associated costs
4 and benefits” of the EIM.^{3/} On April 18, 2014, the Company filed an application in UM
5 1689 to defer its initial EIM costs, and stated that it intends to “convene a collaborative
6 process ... to explore the development of a balancing account to reflect the variable cost
7 and benefits of EIM in rates.”^{4/} As of this date, however, the Company has not made any
8 proposals regarding the form or structure of a prospective EIM balancing account.
9 Accordingly, at this time, it would be inappropriate to make a decision to exclude EIM
10 benefits from the TAM based on speculation that such a mechanism may be developed in
11 a future proceeding, particularly since the Company is asking to defer costs associated
12 with the EIM.

13 **Q. NOTWITHSTANDING, IS A SEPARATE POWER COST MECHANISM FOR**
14 **THE EIM NECESSARY?**

15 A. No. The NPC benefits associated with the EIM should be reflected in the Company’s
16 PCAM. To the extent that the EIM NPC benefits are reflected in a separate mechanism,
17 there are a number of concerning issues with attempting to “carve-out” actual EIM
18 benefits from the PCAM. Foremost, the Company has not demonstrated that it will be
19 possible to calculate, in retrospect, the NPC benefits associated with the EIM in actual
20 operations. For example, the Company has not demonstrated how the value of reserve
21 savings, which can only be estimated using modeling techniques, and the value of
22 improved intra-regional dispatch, which reflects overall improvements in how the system
23 will operate, can be calculated in actual operations. There is reason to be concerned that

^{3/} PAC/100 at 4:19-21.

^{4/} Docket No. UM 1689, Company EIM Application at 2:8-10.

1 an EIM balancing account would result in a controversial proceeding where complex
2 modeling methodologies must be reviewed annually by parties to ensure that the full
3 amount of benefits are reflected in rates.

4 **Q. IF THE COMMISSION ULTIMATELY APPROVES A BALANCING ACCOUNT**
5 **IN A FUTURE PROCEEDING, SHOULD A BASE LEVEL OF EIM BENEFITS**
6 **STILL BE REFLECTED IN NPC IN THIS PROCEEDING?**

7 A. Yes. Irrespective of any potential balancing account, a base level of EIM benefits should
8 be reflected in NPC rates. Whether that benefit is trued-up through the PCAM, or through
9 some other mechanism, it should first be included in the base forecast in order to ensure
10 that customers receive the benefits of the Company’s EIM activities in a timely manner.

11 **Q. HOW DO YOU PROPOSE TO QUANTIFY EIM BENEFITS IN THE TEST**
12 **PERIOD?**

13 A. The Company has argued that a study performed by Energy and Environmental
14 Economics, Inc. (“E3”)^{5/} demonstrates that its decision to join the EIM was prudent.^{6/} I
15 propose to use the same E3 study to develop a provision for EIM benefits in the test
16 period. The E3 study supports including EIM benefits of \$38.1 million total company,
17 \$9.4 million Oregon-allocated, in test period NPC.

18 **Q. WHY SHOULD THE E3 STUDY BE USED TO ESTABLISH A BASE LEVEL OF**
19 **EIM BENEFITS IN THE TEST PERIOD?**

20 A. The Company relied on the E3 study in deciding to join the EIM,^{7/} and continues to rely
21 on the study results as evidence that its decision to join the EIM was prudent.^{8/} Given
22 that the Company believes the E3 study is sufficient to support the prudence of its

^{5/} ICNU/102.
^{6/} ICNU/103 at 10:11-18.
^{7/} Id. at 4:1-5.
^{8/} Id. at 10:12-14.

1 decision to join the EIM, it should also be sufficient for establishing a base level of EIM
2 benefits for ratemaking.

3 **Q. WILL YOU PROVIDE AN OVERVIEW OF THE E3 STUDY?**

4 A. The E3 study was issued jointly by the Company and the California Independent System
5 Operator (“Cal-ISO”) on March 13, 2013. It was commissioned to examine the benefits
6 of a potential EIM between the Company and the Cal-ISO. The study, which developed
7 a range of benefits based on several uncertain parameters, evaluated benefits attributable
8 to the following categories:

- 9
10 1. *Interregional dispatch savings*, by realizing the efficiency of
11 combined 5-minute dispatch, which would reduce “transactional
12 friction” (e.g., transmission charges) and alleviate structural
13 impediments currently preventing trade between the two
14 systems;
- 15 2. *Intraregional dispatch savings*, by enabling PacifiCorp
16 generators to be dispatched more efficiently through the [Cal-
17 ISO’s] automated system (nodal dispatch software), including
18 benefits from more efficient transmission utilization;
- 19 3. *Reduced flexibility reserves*, by aggregating the two systems’
20 load, wind, and solar variability and forecast errors; and
- 21 4. *Reduced renewable energy curtailment*, by allowing [Balancing
22 Authorities] to export or reduce imports of renewable
23 generation when it would otherwise need to be curtailed.^{9/}

24 **Q. WHAT RANGE OF BENEFITS DID THE E3 STUDY FORECAST FOR THE**
25 **COMPANY?**

26 A. The range of benefits forecast for the Company were \$10.5 million to \$54.4 million in
27 2012\$, represented in Table 2, below.^{10/}

^{9/} ICNU/102 at 6-7.

^{10/} Id. at 35.

1
2

TABLE 2
PACIFICORP EIM BENEFITS IN E3 STUDY

Table 6. Attribution of EIM benefits to PacifiCorp in 2017 (million 2012\$)

Benefit Category	Low transfer capability		Medium transfer capability		High transfer capability	
	Low Range	High Range	Low Range	High Range	Low Range	High Range
	Interregional dispatch	\$7.0	\$5.5	\$11.2	\$8.9	\$11.2
Intraregional dispatch	\$2.3	\$23.0	\$2.3	\$23.0	\$2.3	\$23.0
Flexibility reserves	\$1.2	\$6.1	\$3.2	\$14.9	\$3.9	\$22.5
Renewable curtailment	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total benefits	\$10.5	\$34.6	\$16.7	\$46.8	\$17.4	\$54.4

Note: Attributed values may not match totals due to independent rounding.

3 **Q. DID THE E3 STUDY INCLUDE ALL OF THE EXPECTED BENEFITS**
4 **ASSOCIATED WITH THE EIM?**

5 A. No. The E3 study was performed on an hourly basis and excluded within-hour dispatch
6 benefits.^{11/} The within-hour dispatch benefits, which represent reserve savings and
7 market optimization resulting from participation in sub-hourly markets, have been
8 demonstrated to be material. A study performed by National Renewable Energy
9 Laboratory (“NREL”), for example, included within-hour dispatch benefits and forecast
10 PacifiCorp benefits of \$180 million,^{12/} over twice the amount of benefits forecast in the
11 E3 study. While it was performed to analyze an EIM that encompassed the entire
12 western interconnection, the NREL study is an indication that the inter-hour dispatch
13 benefits likely represent a material portion of the EIM benefits PacifiCorp will be capable
14 of achieving.

^{11/} Id. at 37.

^{12/} Examination of Potential Benefits of an Energy Imbalance Market in the Western Interconnection, NREL (Mar. 2013). For the \$180 million figure, see NREL/Plexos Analysis of the Proposed EIM in the Western Interconnection: Individual BA Results, NREL at 39 (July 24, 2012). A copy of these reports are available online at <http://westernenergyboard.org/energy-imbalance-market/documents/>

1 **Q. BASED ON THE RANGE PRESENTED, HOW HAVE YOU DETERMINED THE**
2 **LEVEL OF BENEFITS TO APPLY IN THE TEST PERIOD?**

3 A. Table 3, below, details the EIM benefits that I believe will be representative of the test
4 period. It also includes a provision for within-hour dispatch benefits, which were
5 excluded from the E3 study.

6 **TABLE 3**
7 **PROPOSED TEST PERIOD EIM BENEFITS**
8 **(Millions)**

Benefit Description	Test Period CY 2015
Interregional dispatch	8.90
Intraregional dispatch	12.65
Flexibility reserves	14.90
Within-hour dispatch	7.49
Total company benefit (\$2012)	36.45
In test period dollars (\$2015)	38.11
Oregon allocated @ 24.78%	9.44

9 **Q. WHAT ASSUMPTIONS FROM THE E3 STUDY DO YOU RELY ON TO**
10 **ARRIVE AT THESE EIM BENEFIT VALUES?**

11 A. The level of benefits in Table 3 are based on the assumptions detailed in Table 4, below.
12 Because the range of EIM benefits presented in the E3 study were sensitive to several key
13 assumptions, the amount attributable to the test period can be ascertained by selecting the
14 assumptions that most accurately represent what is known about the test period at this
15 time.

1
2
3
TABLE 4
SUMMARY OF PROPOSED E3 STUDY ASSUMPTIONS
FOR TEST PERIOD EIM BENEFITS

<u>Assumption</u>	<u>Test Period Value</u>
EIM transfer capability	400 MW
Hydropower contribution to flexibility reserves	12%
Share of intra-regional dispatch savings achieved	55%
Within-hour dispatch	Estimate w/GRID

4 **Q. WHY IS 400 MW AN APPROPRIATE ASSUMPTION FOR EIM TRANSFER**
5 **CAPABILITY IN THE TEST PERIOD?**

6 A. PacifiCorp has several interconnections and contract transmission rights between the Cal-
7 ISO that can potentially be utilized for EIM activity. Transmission transfer capability
8 limits the amount of imbalance energy that can flow between the Company and the Cal-
9 ISO, and accordingly, impacts the amount of benefits that will be achieved. The E3 study
10 presented a range of benefits based on three different potential interchange capabilities
11 between the Company and the Cal-ISO, specifically 100 MW, 400 MW, and 800 MW.^{13/}
12 While the EIM transfer capability was not known at the time of the E3 study, the
13 Company subsequently has stated that it “currently has long-term contract wheeling
14 rights of 331 MW northbound and 432 MW southbound with PacifiCorp Transmission”
15 to facilitate EIM transfers, and that it is currently in the process of negotiating additional

^{13/} ICNU/102 at 20.

1 transfer capability with the Bonneville Power Administration.^{14/} Accordingly, the 400
2 MW assumption, which falls close to the Company's current capabilities, best represents
3 the amount of transfer capability to assume in the test period.

4 **Q. WILL THE AVAILABLE TRANSFER CAPABILITY CHANGE WHEN NV**
5 **ENERGY JOINS THE EIM IN OCTOBER 2015?**

6 A. Yes. While it has not been incorporated into the EIM benefits detailed above, when NV
7 Energy joins the EIM in the fourth quarter of 2015, the amount of EIM transfer
8 capability, and, consequently, EIM benefits, will likely increase. This was documented in
9 a separate study performed by the E3 consulting firm, in which it forecasts that the
10 Company and the Cal-ISO will achieve an additional \$3.2 to \$17.2 million in EIM
11 benefits as result of NV Energy joining the market.^{15/} Thus, the assumption of 400 MWs
12 of EIM transfer capability during the full test year is a conservative estimate.

13 **Q. WHY IS IT APPROPRIATE TO ASSUME A 10 PERCENT LEVEL OF HYDRO**
14 **CONTRIBUTION TO FLEXIBILITY RESERVES?**

15 A. In the E3 study, flexibility reserve savings and intra-regional dispatch savings benefits
16 are both sensitive to the percent of Company hydro capacity that will be capable of
17 providing EIM flexibility reserves. The E3 study analyzed both a 12 percent and 25
18 percent level of hydro contribution to flexibility reserves.^{16/} Because the 12 percent level
19 is the more conservative assumption, the 12 percent level was assumed in the EIM
20 benefits detailed in Table 3.

^{14/} ICNU/103 at 5:13-22.

^{15/} See Docket No. UM 1689, NV Energy-ISO Energy Balance Market Economic Assessment dated March 25, 2014, at 51 (June 6, 2014).

^{16/} ICNU/102 at 21.

1 **Q. WHY DO YOU SUPPORT AN ASSUMPTION THAT PACIFICORP WILL**
2 **ACHIEVE 55 PERCENT OF THE INTRA-REGIONAL DISPATCH BENEFITS**
3 **CALCULATED IN THE E3 STUDY?**

4 A. Intra-regional dispatch benefits represent the improved dispatch optimization that will
5 result from PacifiCorp utilizing the Cal-ISO security constrained economic dispatch
6 (“SCED”) model. The Company’s current dispatch practices are largely manual,
7 involving a trader calling a plant operator to request a plant to increase or decrease
8 output. When the Cal-ISO model is deployed on the Company’s system, plant dispatch
9 will be controlled and optimized by the model. As a result, the Company’s system will
10 operate in a more efficient manner, reducing overall NPC.

11 The intra-regional dispatch benefits reported in the E3 study were calculated
12 based on the total amount of benefits achieved by Cal-ISO when it initially implemented
13 its SCED model, prorated for the Company’s load.^{17/} In calculating the range of benefits,
14 the low estimate in the E3 study assumed that only 10 percent of these intra-regional
15 benefits would be achieved by the Company.^{18/} The high estimate assumed that 100
16 percent of these intra-regional benefits would be achieved by the Company. Based on the
17 high estimate, the total amount of potential intra-regional dispatch benefits were
18 calculated to be \$23 million.^{19/}

19 I support including an assumption that 55 percent of the \$23 million intra-regional
20 dispatch benefits calculated in the E3 study will be achieved by the Company. Because
21 the GRID model optimizes system dispatch, subject to system constraints, such as market
22 caps, the value of using the Cal-ISO SCED model can be estimated by relaxing those
23 constraints in GRID. To develop a proxy for the amount of intra-regional dispatch

^{17/} ICNU/102 at 23-24.

^{18/} Id. at 24.

^{19/} Id.

1 benefits that will be achieved, I performed a GRID study to evaluate the benefit
2 associated with eliminating the market cap constraints from the model. This study
3 resulted in an approximate \$12.7 million reduction to NPC, which represents
4 approximately 55 percent of the total intra-regional dispatch benefits calculated in the E3
5 study.

6 **Q. HOW HAVE YOU QUANTIFIED THE WITHIN-HOUR DISPATCH BENEFITS**
7 **ASSOCIATED WITH THE EIM?**

8 A. I quantified these benefits based on a sensitivity performed in the Company's 2012 Wind
9 Integration Study that analyzed the reserve savings associated with 30-minute
10 balancing.^{20/} Because the EIM is a five minute market, I viewed the 30-minute balancing
11 reserves to represent a conservative estimate of within-hour dispatch benefits that will be
12 achieved. The 30-minute balancing reserves calculated in the 2012 Wind Integration
13 Study were modeled in GRID using the same methodology employed by the Company to
14 model reserves for load and wind in its filing. This GRID study resulted in a \$7.5 million
15 reduction to NPC attributable to 30-minute balancing, which represents a conservative
16 estimate of within-hour EIM dispatch benefits.

17 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION TO INCLUDE EIM**
18 **BENEFITS IN THE TAM.**

19 A. As a component of the Company's NPC after it joins the EIM in October 2014, EIM
20 benefits are appropriately included in the TAM, regardless of whether these benefits will
21 later be subject to the Company's PCAM or another mechanism. Using conservative
22 assumptions from the same study the Company uses to justify its participation in the
23 EIM, I project \$38.1 million in total company benefits, \$9.4 million Oregon-allocated.

^{20/} See PacifiCorp, 2013 Integrated Resource Plan, Volume II, Appendix H at 123 (Apr. 30, 2013).

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1689

In the Matter of)
)
PACIFICORP d/b/a PACIFIC POWER)
)
Application for Approval of Deferred)
Accounting and Prudence Determination)
Associated with the Energy Imbalance Market)
_____)

EXHIBIT ICNU/103

PACIFICORP'S RESPONSES TO ICNU DATA REQUESTS 1.19 AND 1.21

June 23, 2014

UM-1689/PacifiCorp
May 16, 2014
ICNU Data Request 1.19

ICNU Data Request 1.19

On Page 18 of the Transmittal Letter to the EIM Tariff Filing, PacifiCorp states that EIM capital and operations and maintenance costs will be recovered through transmission formula rates. See Footnotes 27 and 28. Does the Company consider this to be inconsistent with the proposal made in Docket UM 1689 to include these expenditures in a deferred account? Please explain your answer in detail.

Response to ICNU Data Request 1.19

No. All transmission costs are included in retail rates. Transmission customers pay a portion of these costs through transmission rates. Revenues from third-party transmission customers are included in retail rates as a credit to retail customers.

UM-1689/PacifiCorp
May 16, 2014
ICNU Data Request 1.21

ICNU Data Request 1.21

Please state the amount of EIM-related operations and maintenance expense that will be included in PacifiCorp's June 2014 formula rate annual update. If the Company is not yet aware of what these costs will be, please update this request contemporaneous to when the Company makes its June 2014 formula rate annual update.

Response to ICNU Data Request 1.21

The June 2014 annual update of PacifiCorp's transmission formula includes the calculation of a true-up rate for calendar year 2013 (2013 True-up) and the calculation of a projected rate for the rate year beginning June 1, 2014 and ending May 31, 2015 (2014 Projection). Both the 2013 True-up and the 2014 Projection incorporate operations and maintenance (O&M) and administrative and general (A&G) expense data from calendar year 2013.

Of the 2013 Energy Imbalance Market (EIM) related O&M and A&G expenses booked to formula-approved FERC accounts and deemed appropriate for inclusion in wholesale rates, \$612,071 is included in transmission O&M accounts and \$340,206 is included in a directly-assigned A&G account.