

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UE 307**

In the Matter of )  
 )  
PACIFICORP, dba PACIFIC POWER, )  
 ) **CUB'S CROSS-EXAMINATION**  
2017 Transition Adjustment Mechanism. ) **EXHIBITS**  
\_\_\_\_\_ )

The Citizens' Utility Board of Oregon ("CUB") hereby submits its Cross Examination Exhibits in this proceeding. Based on the record and discovery provided at this time, CUB intends to introduce the following Exhibits at the hearing:

<b>Cross Examination Exhibit</b>	<b>Description</b>
DR 75	Data Response from PAC to CUB
DR 83	Data Response from PAC to CUB
DR 79 Supplemental CONF	Confidential Data Response from PAC to CUB
DR 84	Data Response from PAC to CUB

CUB also reserves the right to move for admission of any additional material provided in discovery after the time of this filing.

DATED this 25th day of August, 2016.

MICHAEL GOETZ



Michael P. Goetz, OSB #141465  
Staff Attorney  
Citizens' Utility Board of Oregon  
610 SW Broadway, Ste. 400  
Portland, OR 97205  
T | 503.227.1984 x 16  
F | 503.224.2596  
E | mike@oregoncub.org

### **CUB Data Request 75**

CUB also asked about the DA-RT adjustment and the EIM benefits, in particular, the intra-regional benefits. CUB based its testimony off of the Company's testimony, the Company's response to CUB's data request on the issue, and conversations with the Company where CUB understood that the Company excluded intra-regional benefits because the Company believed that CAISO was accounting for intra-regional benefits that were taken as the difference between actual operations, and the Company's manual or pre-automated internal dispatch. Staff's testimony states that CAISO calculations do not use obsolete manual dispatch as the benchmark.

Please document and provide the Company's sources that state that CAISO calculates benefits by benchmarking the company's manual system. In addition, since the Company has been mostly automated for over two years, how does CAISO have access to relevant manual dispatch data for the Company in the current period?

### **Response to CUB Data Request 75**

In its calculation of energy imbalance market (EIM) Benefits for PacifiCorp, the California Independent System Operator (CAISO) utilizes a counterfactual dispatch of a limited pool of resources to meet changes in load compared to a base schedule. This limited pool of resources is meant to simulate the manual dispatch that PacifiCorp utilized prior to the implementation of EIM. Other resources not dispatched to meet load imbalance in the counterfactual remain at the base schedules submitted prior to EIM operation. Please refer to the CAISO EIM Benefit Methodology located at the following website for additional information:

[https://www.caiso.com/Documents/EIM\\_BenefitMethodology.pdf](https://www.caiso.com/Documents/EIM_BenefitMethodology.pdf)

Specifically, refer to the section 'PacifiCorp counterfactual dispatch' on page 4 of the referenced document.

### **CUB Data Request 83**

PAC/400/Dickman/63 - Please explain in detail how in the non-sub-hourly market, the Company's operations differ from how the Company balances its system under current operations, lines 11-22. In particular, if a Company finds itself in oversupply, would it normally sell excess purchased power, or back down available generation? Please also explain the different impacts of these two alternatives.

### **Response to CUB Data Request 83**

In the absence of a sub-hourly market, the Company can only sell to third parties for an entire hour. If capacity may be required at any point in the hour (in actual operation, not just according to a forecast), that capacity must be held back in case it is needed and it cannot be sold in advance. The Company seeks to sell generation in excess of what might be needed at any point in the upcoming hour if available market opportunities are above the variable cost of generation.

If market opportunities and economic generation are available, net power costs (NPC) will be reduced. If either is lacking, those NPC benefits cannot be achieved.

### **CUB Data Request 84**

PAC/400/Dickman/62 - The Company quotes the CAISO report stating “it is attributed to NVE’s optimization of its base schedules prior to submission the EIM”. To the best of PAC’s knowledge, when referring to “base schedules,” is CAISO referring to the base schedules submitted daily by each Company CAISO BSAP manual, or some base schedule submitted and fixed in stone when the company joined the EIM?

- (a) Does PAC submit a base schedule to CAISO on a daily basis? If not daily, how often?
- (b) Is PAC’s base schedule that it submits at the aforementioned intervals pre-optimized to the hourly level? If not, please explain, how it is sub-optimal?

### **Response to CUB Data Request 84**

- (a) PacifiCorp submits a base schedule on a daily and hourly basis. The base schedules that PacifiCorp is referring to at PAC/400/Dickman/62 are submitted to the California Independent System Operator (CAISO) through the Base Schedule Aggregation Portal (BSAP) at 40 minutes prior to each operating hour.
- (b) PacifiCorp prepares its base schedule to the best of its ability, taking into consideration the current load forecast, variable energy resource forecast and flexible operating requirements. The base schedule is sub-optimal due to the fact it is manually prepared with information available one to two hours prior to the operating hour and is biased toward utilization of the natural gas generating units due to their ability to meet flexible operating requirements.

DR 79 Supplemental Contains Highly Confidential Material Subject to Protective Order  
No. 16-231

Redacted from this Non-Confidential Filing

## CERTIFICATE OF SERVICE

I certify that on August 25, 2016, I served the non-confidential portions of Citizens' Utility Board's cross examination exhibits on all parties to the service list for UE 307 via the Oregon Public Utility Commission's electronic filing system, and that I served the confidential portions of the filing on the following qualified individuals via overnight delivery.

<b>INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES</b>		
	BRADLEY MULLINS (C)	333 SW TAYLOR STE 400
	MOUNTAIN WEST ANALYTICS	PORTLAND OR 97204
		brmullins@mwanalytics.com
	TYLER C PEPPLE (C) (HC)	333 SW TAYLOR SUITE 400
	DAVISON VAN CLEVE, PC	PORTLAND OR 97204
		tcp@dvclaw.com
	S BRADLEY VAN CLEVE (C)	333 SW TAYLOR - STE 400
	DAVISON VAN CLEVE PC	PORTLAND OR 97204
		bvc@dvclaw.com
<b>NOBLE AMERICAS ENERGY SOLUTIONS</b>		
	GREGORY M. ADAMS (C) (HC)	PO BOX 7218
	RICHARDSON ADAMS, PLLC	BOISE ID 83702
		greg@richardsonadams.com
	GREG BASS	401 WEST A ST., STE. 500
	NOBLE AMERICAS ENERGY SOLUTIONS, LLC	SAN DIEGO CA 92101
		gbass@noblesolutions.com
	KEVIN HIGGINS (C)	215 STATE ST - STE 200
	ENERGY STRATEGIES LLC	SALT LAKE CITY UT 84111-2322
		khiggins@energystrat.com
<b>PACIFICORP UE 307</b>		
	PACIFICORP, DBA PACIFIC POWER	825 NE MULTNOMAH ST, STE 2000
		PORTLAND OR 97232
		oregondockets@pacificorp.com

	KATHERINE A MCDOWELL (C) (HC)	419 SW 11TH AVE., SUITE 400
	MCDOWELL RACKNER & GIBSON PC	PORTLAND OR 97205
		katherine@mcd-law.com
	MATTHEW MCVEE (C) (HC)	825 NE MULTNOMAH
	PACIFICORP	PORTLAND OR 97232
		matthew.mcvee@pacificorp.com
<b>STAFF UE 307</b>		
	JOHN CRIDER (C) (HC)	PO BOX 1088
	PUBLIC UTILITY COMMISSION OF OREGON	SALEM OR 97308-1088
		john.crider@state.or.us
	SOMMER MOSER (C) (HC)	1162 COURT ST NE
	PUC STAFF - DEPARTMENT OF JUSTICE	SALEM OR 97301
		sommer.moser@doj.state.or.us
	MICHAEL T WEIRICH (C) (HC)	BUSINESS ACTIVITIES SECTION
	PUC STAFF-- DEPARTMENT OF JUSTICE	1162 COURT ST NE
		SALEM OR 97301-4096
		michael.weirich@state.or.us

By: /s/ Michael Goetz

Michael P. Goetz, OSB #141465  
Staff Attorney  
Citizens' Utility Board of Oregon  
610 SW Broadway, Ste. 400  
Portland, OR 97205  
T | 503.227.1984 x 16  
F | 503.224.2596  
E | mike@oregoncub.org