

825 NE Multnomah, Suite 2000 Portland, Oregon 97232

October 3, 2016

VIA ELECTRONIC FILING

Public Utility Commission of Oregon 201 High Street SE, Suite 100 Salem, OR 97301-1166

Attn: Filing Center

RE: UE 309—Stipulation and Joint Testimony

PacifiCorp d/b/a Pacific Power (Company or PacifiCorp) encloses for filing in this docket the following documents:

- The Stipulation between PacifiCorp, Staff of the Public Utility Commission of Oregon, and the Citizens' Utility Board of Oregon; and
- Joint Testimony in Support of the Stipulation.

If you have questions about this filing, please contact Natasha Siores at (503) 813-6583.

Sincerely,

BDally

R. Bryce Dalley Vice President, Regulation

Enclosures

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 309

In the Matter of

PACIFICORP d/b/a PACIFIC POWER

STIPULATION

2015 Power Cost Adjustment Mechanism

1	INTRODUCTION
2	1. PacifiCorp d/b/a Pacific Power (PacifiCorp or Company), Staff of the Public
3	Utility Commission of Oregon (Staff), and the Citizens' Utility Board (CUB) (collectively the
4	Stipulating Parties) enter into this Stipulation to resolve all issues in docket UE 309, PacifiCorp's
5	2015 power cost adjustment mechanism (PCAM). No other party intervened in this docket.
6	BACKGROUND
7	2. The Public Utility Commission of Oregon (Commission) approved PacifiCorp's
8	PCAM in Order No. 12-493 in docket UE 246. The PCAM allows the recovery or refund of the
9	difference between actual net power costs (NPC) incurred to serve customers and the base NPC
10	established in the Company's annual transition adjustment mechanism (TAM) filing. The
11	amount recovered from or refunded to customers for a given year is subject to the following
12	parameters:
13	• Asymmetrical Deadband – Any NPC difference between negative \$15 million and
14	positive \$30 million is absorbed by the Company.
15	• Sharing Mechanism – Any NPC difference above or below the deadband is shared
16	90 percent by customers and 10 percent by the Company.

1	• Earnings Test – If the Company's earned return on equity (ROE) is within plus or
2	minus 100 basis points of the allowed ROE, there is no recovery from or refund to
3	customers.
4	• Amortization Cap – The amortization of deferred amounts are capped at six
5	percent of the revenue for the preceding calendar year. ¹
6	3. On May 13, 2016, PacifiCorp filed its PCAM for calendar year 2015.
7	Attachment A to this Stipulation is a summary of the Company's PCAM calculation. On a total-
8	company basis, adjusted actual NPC were \$1.54 billion for calendar year 2015, which was
9	approximately \$56 million higher than the base NPC of \$1.48 billion established in the 2015
10	TAM (docket UE 287). On an Oregon-allocated basis, actual PCAM costs exceeded base
11	PCAM costs by approximately \$19.9 million.
12	4. After application of the deadband, there is no recovery for the 2015 PCAM.
13	5. The Stipulating Parties held a settlement conference on July 22, 2016. This
14	conference resulted in an agreement resolving all issues in this docket, subject to Staff's review
15	of PacifiCorp's responses to discovery requests. On August 24, 2016, PacifiCorp provided its
16	responses to Staff's data request.
17	AGREEMENT
18	6. The Stipulating Parties agree that the Company's PCAM calculation for calendar
19	year 2015, as set forth in the Company's initial filing and summarize above, complies with
20	Order No. 12-493 and results in no change to existing rates.

¹ In the Matter of PacifiCorp d/b/a Pacific Power's Request for a General Rate Revision, Docket UE 246, Order No. 12-493 at 15 (Dec. 20, 2012).

7. The Stipulating Parties agree to submit this Stipulation to the Commission and
 request that the Commission approve the Stipulation as presented. The Stipulating Parties agree
 that this Stipulation will result in rates that meet the standard in ORS 756.040.

8. This Stipulation will be offered in to the record as evidence under OAR 860-001-0350(7). The Stipulating Parties agree to support this Stipulation throughout this proceeding and any appeal, provide witnesses to sponsor the Stipulation at hearing, if required, and recommend that the Commission issue an order adopting the Stipulation.

9. The Stipulating Parties have negotiated this Stipulation as an integrated 9 document. If the Commission rejects all or any material portion of this Stipulation or imposes 10 additional material conditions in approving this Stipulation, any of the Stipulating Parties are 11 entitled to withdraw from the Stipulation or exercise any other rights provided in OAR 860-001-12 0325(9). To withdraw from the Stipulation, a Stipulating Party must provide written notice to 13 the Commission and the other Stipulating Parties within five days of service of the final order 14 rejecting, modifying, or conditioning this Stipulation.

15 10. By entering into this Stipulation, no Settling Party approves, admits, or consents
16 to the facts, principles, methods, or theories employed by any other Settling Party.

17 11. This Stipulation is not enforceable by any Settling Party unless and until adopted 18 by the Commission in a final order. Each signatory to this Stipulation avers that they are signing 19 this Stipulation in good faith and that they intend to abide by the terms of this Stipulation unless 20 and until the Stipulation is rejected or adopted only in part by the Commission. The Settling 21 Parties agree that the Commission has exclusive jurisdiction to enforce or modify the Stipulation. 22 If the Commission rejects or modifies this Stipulation, the Settling Parties reserve the right to

UE 309 – STIPULATION

3

- seek reconsideration or rehearing of the Commission order under ORS 756.561 and OAR 860-1
- 001-0720 or to appeal the Commission order under ORS 756.61 0. 2
- 12. This Stipulation may be executed in counterparts and each signed counterpart 3
- constitutes an original document. 4
 - This Stipulation is entered into by each Settling Party on the date entered below such
- Settling Party's signature. 6

PACIFICORP

5

STAFF of the PUBLIC UTILITY COMMISSION OF OREGON

By: PDull By:

Date: _____ Date: _____

CITIZENS' UTILITY BOARD

Ву: _____

Date:

seek reconsideration or rehearing of the Commission order under ORS 756.561 and OAR 860-1

- 001-0720 or to appeal the Commission order under ORS 756.61 0. 2
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PACIFICORP

STAFF of the PUBLIC UTILITY COMMISSION OF OREGON

By: _____

Date: _____

CITIZENS' UTILITY BOARD

By: _____

Date: _____

seek reconsideration or rehearing of the Commission order under ORS 756.561 and OAR 860-001-0720 or to appeal the Commission order under ORS 756.61 0.

12. This Stipulation may be executed in counterparts and each signed counterpart constitutes an original document.

This Stipulation is entered into by each Settling Party on the date entered below such Settling Party's signature.

PACIFICORP

STAFF of the PUBLIC UTILITY COMMISSION OF OREGON

Ву: _____

By:

Date:		
L'au,		

Date: _____

CITIZENS' UTILITY BOARD By:

9/28/16 Date:

ATTACHMENT A

Oregon Power Cost Adjustment Mechanism January 1, 2015 - December 31, 2015 Attachment A - Power Cost Adjustment Mechanism Calculation

Line No.	Reference	Jan-15	Feb-15	Mar-15		Apr-15 N	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	F	Total
Actual: 1 Total Company NPC 2 EIM Costs 3 Other Revenues 4 Total PCAM Actual Costs 5 Actual Retail Load	(2.1) (4.1) (5.1) Sum Lines 1 - 3 (6.1)	124,6 4 (1,8 123,22	\$ 109,20 14 (1,84 (1,84 (1,84 (1,84) (1,84) (1,84)	\$ 121,8 4 (1,9 \$ 120,3 4,3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ა ა	121,118,640 \$ 490,511 (1,938,377) 119,670,775 \$ 4,244,430	150,140,887 \$ 490,511 (1,837,681) 148,793,718 \$ 4,944,117	166,243,018 \$ 490,511 (2,021,756) (2,021,776) 164,711,774 \$ 5,050,052	146,380,939 \$ 490,51 1 (2,000,263) 144,871,187 \$ 4,975,546	124,677,694 \$ 490,511 (1,913,296) 123,254,909 \$ 4,337,122	117,139,173 \$ 490,511 (2,191,675) (2,191,675) 115,438,010 \$ 4,292,573	116,416,844 \$ 490,511 (2,051,688) (2,051,688) 114,855,667 \$ 4,547,385	125,299,927 490,511 (2,211,062) 123,579,375 4,854,265		1,541,620,883 5,886,135 (23,812,651) 1,523,694,367 54,589,759
	Line 1 / Line 5	\$ 25.73	\$ 26.59	s	27.88 \$	27.99 \$	28.19 \$	30.10 \$	32.62 \$	29.12 \$	28.42 \$	26.89 \$	25.26 \$	25.46	s	27.91
Base: 7 NPC 8 Adjustment for Direct Acess	(3.1) (3.3)	\$ 121,469,254 (544,573)	\$ 7	\$ 7	\$	114,682,128 \$ (477,758)	118, 292,436 \$ (477,160)	121,669,854 \$ (498,494)	142,592,544 \$ (659,988)	142,745,113 \$ (690,287)	120,019,116 \$ (594,948)	119,792,313 \$ (598,995)	118,926,472 \$ (627,345)	129,172,394 (695,262)	ۍ ۲	1,479,483,666 (6,852,331)
	(3.4) (3.4)	(558,333) 558,333 (20047204)					(558,333) 558,333 // 047.201)	(558,333) 558,333 /2017 201	(558,333) 558,333 (10.047.004)	(558,333) 558,333 (200472001)	(558,333) 558,333 /2 047 204)	(558,333) 558,333 /2 047 204)	(558,333) 558,333 (2047 204)	(558,333) 558,333 258,333		(6,700,000) 6,700,000
1. Outer revenues 1. Total PCAM Base Costs 13. Base Basel road	(3.2) Sum Lines 7 - 11 (6.1)	\$ 118,907,480 4 802 150	\$ 109,817,818 4 334 200	ŝ	Ś	(ב,017,201) 112,187,169 \$ 4.228,663	(2,017,201) 115,798,075 \$ 4.383,454	(119,154,160 \$ 4.466.763	(2,011,201) 139,915,355 \$ 5.052372	(2,017,201) 140,037,625 \$ 4 975 376	117,406,968 \$ 4 380 286	(2,017,201) 117,176,117 \$ 4.400.477	(z,017, 201) 116,281,927 \$ 4.521.178	126,459,931 4 and 205	\$	(24,200,409) 1,448,424,926 55 032 084
	Line 7 / Line 13	\$ 24.31	s	69	s	26.53 \$	26.42 \$	26.68 \$	27.69 \$	28.15 \$	26.80 \$	26.63 \$	25.72 \$	25.76	s	26.32
15 NPC Differential \$/MWh	Line 6 - Line 14	\$ 1.42	\$ 1.26	26 \$	2.20 \$	1.46 \$	1.78 \$	3.42 \$	4.92 \$	0.97 \$	1.62 \$	0.26 \$	(0.46) \$	(0:30)	ŝ	1.59 #
16 Oregon Retail Load	(6.1)	1,178,135	961,704		1,041,696	1,007,767	987,576	1,114,565	1,134,034	1,164,054	935,245	988,479	1,115,800	1,233,406		12,862,461
Deferral: Monthly NPC Differential - Above or (Below) Base	Line 16 * Line 15	\$ 1,677,242	\$ 1,207,522	\$	2,293,075 \$	1,474,582 \$	1,755,606 \$	3,811,113 \$	5,582,678 \$	1,129,721 \$	1,510,512 \$	261,400 \$	(515,354) \$	(372,317)	Ś	19,815,781
Situs Resource True-Up: 18 Black Cap Actual 19 Black Can Forerast	(2.2) CY2015 TAM	\$ (4,007) \$ (5.295))\$ (3,506))\$ (3,506)	თ თ	(5,806) \$ (8.995) \$	(7,716) \$ (12.305) \$	(11,135) \$ (13,462) \$	(19,580) \$ (14,437) \$	(19,624) \$ (19.598) \$	(14,169) \$ (18,760) \$	(9,292) \$ (16.533) \$	(6,333) \$ (10,286) \$	(3,569) \$ (6,468) \$	(1,616) (5,880)	ა ა	(106,353) (141,066)
	Line 18 - Line 19		s	s										4,264	s #	34,713
21 Total Monthly Differential - Above or (Below) Base	Line 17 + Line 20	\$ 1,678,530	\$ 1,213,062	ŝ	2,296,265 \$	1,479,171 \$	1,757,933 \$	3,805,970 \$	5,582,653 \$	1,134,311 \$	1,517,754 \$	265,353 \$	(512,455) \$	(368,053)	в	19,850,494
22 Cumulative Differential - Above or (Below) base		\$ 1,678,530	\$ 2,891,592	\$	5,187,857 \$	6,667,028 \$	8,424,961 \$	12,230,931 \$	17,813,584 \$	18,947,895 \$	20,465,649 \$	20,731,002 \$	20,218,546 \$	19,850,494		
23 Positive Deadband - ABOVE Base 24 Negative Deadband - BELOW Base	Order. 12-493 Order. 12-493	\$ 30,000,000 \$ (15,000,000)	\$ 30,000,000) \$ (15,000,000)	00 \$ 30,000,000 00) \$ (15,000,000)	აა	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 \$ (15,000,000) \$	30,000,000 (15,000,000)	აა	30,000,000 (15,000,000)
25 Amount Deferrable - ABOVE Deadband 26 Amount Deferrable - BELOW Deadband		• • \$ \$	• • \$ \$	s s	s s 	s s	s s	s s	\$ \$ 	s s 	s s	\$ \$ 	\$ \$ 		\$ \$	
27 Total Incremental Deferrable	Line 25 + Line 26	' ഗ	, es e		ю ('	ю ('	ю, о ,	69 ('	• ,	ю (,	ю (,	ю ('	ю ('		<i>с</i> у с	•
28 Sharing Band	Line 27 * 90%	, w	, w	s	99 '		·	59 '			·	·			\$	
6																
29 Monthly Interest Rate 30 Beginning Balance	Note 1 Prior Month Line 33	0.64% \$ -	; 0.64% \$ -	ŝ	0.64% - \$	0.64% - \$	%	0.64%	0.64%	0.64%	0.64%	%	0.64%	0.64%	\$	
	Line 28 Line 29 * (Line 30 + 50% x Line	 	ۍ دی ا		s s	აი თ 		vs v , ,	· ·	· ·	· ·	••••••	••••••		679 64	
	31) ∑ Lines 30:32	s			, s										, s	
Earnings Test: 34 Earned Return on Equity 35 Allowed Return on Equity 36 100bp ROE Revenue Requirement 37 Allowed Defental After Earning Test 38 Total Deferred	(7.1) UE 246														69 69 69	9.36% 9.80% 27,807,899
Notes: Note 1: 7,621% annual interst rate based on Oregon approved rate of return	bregon approved rate of return	-														
																Witnes
																s: Wildii
																ng-Cride Pag

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Exhibit 1 - PCAM Calculation

Page 1 of 1

Docket No. UE 309 Exhibit Joint Stipulating Parties/100 Witness: Wilding-Crider-Jenks

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Joint Stipulating Parties Testimony of Michael Wilding, John Crider, and Bob Jenks

TABLE OF CONTENTS

Joint Testimony Supporting Stipulation	1
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1	Q.	Please state your names, business addresses, and present positions.
2	A.	My name is Michael Wilding. My business address is 825 NE Multnomah Street,
3		Suite 2000, Portland, Oregon 97232. My title is Net Power Cost Mechanism
4		Manager for PacifiCorp. My Witness Qualification Statement is found in Exhibit
5		Joint Stipulating Parties/101.
6		My name is John Crider. My business address is 201 High Street SE,
7		Suite 100, Salem Oregon 97301. I am employed as a Senior Utility Analyst in the
8		Energy Resources and Planning Division of the Public Utility Commission of
9		Oregon (Commission). My Witness Qualification Statement is found in Exhibit
10		Joint Stipulating Parties/102.
11		My name is Bob Jenks. My business address is 610 SW Broadway, Suite
12		400, Portland, Oregon 97205. I am the Executive Director of the Citizens' Utility
13		Board of Oregon (CUB). My Witness Qualification Statement is found in Exhibit
14		Joint Stipulating Parties/103.
15		JOINT TESTIMONY SUPPORTING STIPULATION
16	Q.	What is the purpose of this Joint Testimony?
17	А.	Staff of the Commission (Staff), PacifiCorp, d/b/a Pacific Power (PacifiCorp),
18		and CUB, collectively the Stipulating Parties, jointly provide this testimony in
19		support of the Stipulation, filed concurrent with this Joint Testimony. The
20		Stipulating Parties request that the Commission issue an order approving the
21		Stipulation and implementing its terms.
22	Q.	Have all parties to docket UE 309 joined in the Stipulation?
23	A.	Yes. After a settlement conference held July 22, 2016, all parties to docket

Joint Stipulating Parties Testimony in Support of Stipulation

1		UE 309 agreed that PacifiCorp's actual net power costs (NPC) would not result in
2		a change in rates to customers. After additional settlement communications, all
3		parties executed the Stipulation on September 29, 2016.
4	Q.	Does the Stipulation resolve all issues in docket UE 309?
5	A.	Yes. The Stipulation resolves all issues in docket UE 309. The Stipulating
6		Parties agree that the Company's power cost adjustment mechanism (PCAM) for
7		calendar year 2015, as set forth in its initial filing, complies with Order
8		No. 12-493 and results in no change to PacifiCorp's rates. Commission approval
9		of the Stipulation will result in just and reasonable rates and an efficient
10		resolution of this proceeding.
11	Q.	What is the purpose of PacifiCorp's PCAM?
12	A.	In Order No. 12-493, the Commission approved a PCAM to allow PacifiCorp to
12 13	A.	In Order No. 12-493, the Commission approved a PCAM to allow PacifiCorp to recover the difference between actual NPC incurred to serve customers and the
	A.	
13	A.	recover the difference between actual NPC incurred to serve customers and the
13 14	A.	recover the difference between actual NPC incurred to serve customers and the base NPC established in the Company's annual transition adjustment mechanism
13 14 15	A.	recover the difference between actual NPC incurred to serve customers and the base NPC established in the Company's annual transition adjustment mechanism (TAM) filing. The amount received from or refunded to customers for a given
13 14 15 16	A.	recover the difference between actual NPC incurred to serve customers and the base NPC established in the Company's annual transition adjustment mechanism (TAM) filing. The amount received from or refunded to customers for a given year is subject to deadbands, sharing bands, an earnings test, and an amortization
13 14 15 16 17	А. Q.	recover the difference between actual NPC incurred to serve customers and the base NPC established in the Company's annual transition adjustment mechanism (TAM) filing. The amount received from or refunded to customers for a given year is subject to deadbands, sharing bands, an earnings test, and an amortization cap. ¹ PacifiCorp filed its 2015 PCAM, reflecting actual NPC for calendar year
 13 14 15 16 17 18 		recover the difference between actual NPC incurred to serve customers and the base NPC established in the Company's annual transition adjustment mechanism (TAM) filing. The amount received from or refunded to customers for a given year is subject to deadbands, sharing bands, an earnings test, and an amortization cap. ¹ PacifiCorp filed its 2015 PCAM, reflecting actual NPC for calendar year 2015, on May 13, 2016.

¹ In the Matter of PacifiCorp d/b/a Pacific Power's Request for a General Rate Revision, Docket No. UE 246, Order No. 12-493 at 15 (Dec. 20, 2012).

Joint Stipulating Parties Testimony in Support of Stipulation

1		established in the 2015 TAM (docket UE 287). On an Oregon-allocated basis,
2		actual NPC exceeded base NPC by approximately \$19.9 million.
3	Q.	Did PacifiCorp's actual NPC exceed the deadband in the PCAM?
4	A.	No.
5	Q.	What is the rate impact resulting from actual NPC exceeding the base NPC
6		established in the 2015 TAM?
7	A.	PacifiCorp's 2015 PCAM results in no change to rates because the actual NPC
8		did not exceed the deadband identified in Order No. 12-493.
9	Q.	Does this conclude your joint stipulating parties testimony?
10	A.	Yes.

Docket No. UE 309 Exhibit Joint Stipulating Parties/101 Witness: Wilding-Crider-Jenks

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Exhibit Accompanying Joint Stipulating Parties Testimony of Michael Wilding, John Crider, and Bob Jenks

> Witness Qualification Statement Michael Wilding

WITNESS QUALIFICATION STATEMENT

NAME:	MICHAEL WILDING
EMPLOYER:	PACIFICORP
TITLE:	NET POWER COSTS MECHANISM MANAGER
ADDRESS:	825 N.E. Multnomah Street, Suite 600 Portland, Oregon, 97232
EDUCATION:	Master of Accounting, Weber State University, Ogden Utah
	Bachelor of Science, Accounting Utah State University, Logan, Utah
EXPERIENCE:	I am a Certified Public Accountant licensed in the state of Utah. Prior to joining the Company, I was employed as an internal auditor for Intermountain Healthcare and an auditor for the Utah State Tax Commission. I have been employed by the Company since February 2014.

Docket No. UE 309 Exhibit Joint Stipulating Parties/102 Witness: Wilding-Crider-Jenks

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Exhibit Accompanying Joint Stipulating Parties Testimony of Michael Wilding, John Crider, and Bob Jenks

> Witness Qualification Statement John Crider

WITNESS QUALIFICATION STATEMENT

NAME:	JOHN CRIDER
EMPLOYER:	PUBLIC UTILITY COMMISSION OF OREGON
TITLE:	SENIOR UTILITY ANALYST, ELECTRIC RESOURCES AND PLANNING
ADDRESS:	201 High Street, Suite 100 Salem, OR 97301
EDUCATION:	Bachelor of Science, Engineering University of Maryland
EXPERIENCE:	I have been employed at the Oregon Public Utility Commission (Commission) since August of 2012. My current responsibilities include analysis and technical support for electric power cost recovery proceedings, with an emphasis on variable power costs and purchases from qualifying facilities. Prior to working for the OPUC I was an engineer in the Strategic Planning division for Gainesville Regional Utilities (GRU) in Gainesville, Florida. My responsibilities at GRU included analysis, design and support for generation economic dispatch modeling, wholesale power transactions, net metering, integrated resource planning, distributed solar generation and fuel (coal and natural gas) planning. Previous to working for GRU, I was a staff design engineer for Eugene Water & Electric Board (EWEB) where my responsibilities included design of control and communications system in support of water and hydro operations.

I am a registered professional engineer in both Oregon and Florida.

Docket No. UE 309 Exhibit Joint Stipulating Parties/103 Witness: Wilding-Crider-Jenks

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Exhibit Accompanying Joint Stipulating Parties Testimony of Michael Wilding, John Crider, and Bob Jenks

> Witness Qualification Statement Bob Jenks

WITNESS QUALIFICATION STATEMENT

NAME: BOB JENKS

EMPLOYER: CITIZENS' UTILITY BOARD OF OREGON

- TITLE: EXECUTIVE DIRECTOR
- ADDRESS: 610 SW Broadway, Suite 400 Portland, OR 97205
- EDUCATION: Bachelor of Science, Economics Willamette University, Salem, OR
- EXPERIENCE: Provided testimony or comments in a variety of OPUC dockets, including UE 88, UE 92, UM 903, UM 918, UE 102, UP 168, UT 125, UT 141, UE 115, UE 116, UE 137, UE 139, UE 161, UE 165, UE 167, UE 170, UE 172, UE 173, UE 207, UE 208, UE 210, UG 152, UM 995, UM 1050, UM 1071, UM 1147, UM 1121, UM 1206, UM 1209, UM 1355, UM 1635, UE 233, UE 246, UE 283, UM 1633, and UM 1654. Participated in the development of a variety of Least Cost Plans and PUC Settlement Conferences. Provided testimony to Oregon Legislative Committees on consumer issues relating to energy and telecommunications. Lobbied the Oregon Congressional delegation on behalf of CUB and the National Association of State Utility Consumer Advocates.

Between 1982 and 1991, worked for the Oregon State Public Interest Research Group, the Massachusetts Public Interest Research Group, and the Fund for Public Interest Research on a variety of public policy issues.

MEMBERSHIP: National Association of State Utility Consumer Advocates Board of Directors, OSPIRG Citizen Lobby Telecommunications Policy Committee, Consumer Federation of America Electricity Policy Committee, Consumer Federation of America

Board of Directors (Public Interest Representative), NEEA