

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1452 – VIR Update**

In the Matter of

PUBLIC UTILITY COMMISSION OF  
OREGON  
Update of Volumetric Incentive Rates for  
Solar Photovoltaic Pilot Program.

STAFF’S CLOSING COMMENTS

On July 15, 2011, the Staff of the Public Utility Commission of Oregon (Staff) and the following parties submitted Opening Comments in this proceeding: Idaho Power Company (Idaho Power); Portland General Electric and PacifiCorp (PGE/Pacific); Renewable Northwest Project (RNP); and Oregonians for Renewable Energy Policy (OREP). These comments provide Staff’s reply to these parties Opening Comments regarding the appropriate level of the Volumetric Incentive Rates (VIRs) for the Solar Photovoltaic Pilot Program’s (Pilot Program) October 3, 2011 enrollment window.

Idaho Power Company

Staff and Idaho Power are aligned on both the rationale for the rate adjustment and the recommended rates. Staff and Idaho Power agree that the current VIR level is still above the level necessary to attract participation and meet the goals set for the in House Bill 3039 (*See*: Idaho Power Opening Comments at 2-3). Staff and Idaho Power both recommend a rate of 35.6 cents per kilowatt-hour (kWh) for small-scale systems installed in Rate Class 4. This represents a 35.2 percent reduction from the original VIR set for this class.

Portland General Electric and PacifiCorp

Staff and PGE/Pacific are aligned on the rationale for a reduction to the currently authorized VIR and only differ on the recommended rates. Staff and PGE/Pacific both recognize the importance of minimizing the burden the Pilot Program places on non-participating customers (*See*: PGE/Pacific Opening Comments at 4). Both Staff and PGE/Pacific recognize that the underlying policy question of how to combine bidding and lottery reservations for medium-scale systems requires a recommendation on the medium-scale VIRs at this time (*See*: PGE/Pacific

Opening Comments at 1-2).<sup>1</sup> The main difference between the Staff and PGE/Pacific is that Staff recommends a 10 percent reduction, and PGE/Pacific recommends a 20 percent reduction, for the VIRs for the October 3, 2011 reservation window. At this point in the Pilot Program, with implementation of the changes required by Order No. 11-089 pending, adherence to the automatic rate adjustment mechanism would provide some predictability for those interested in participating in the program.

### Renewable Northwest Project

Staff and RNP are aligned on the recommended rates, but differ on the rationale for a reduction to the currently authorized VIR. Both Staff and RNP recommend a 10 percent reduction for the VIRs for the October 3, 2011 reservation window (*See*: RNP Opening Comments at 3). RNP states, “Based on our financial modeling, we believe a 10% reduction for October 1 will set the VIR within an appropriate range that is sufficient to incentivize solar PV development but is not so high that it would require decreasing by more than that prescribed by the ARAM [Automatic Rate Adjustment Mechanism].” (*See*: RNP Opening Comments at 3).

RNP points to systems being installed for less than \$5.75 per watt and criticizes Staff for a workshop comment indicating “that the VIR is already too low to drive solar development on strictly financial merits.” (*See*: RNP Opening Comments at 3). At the June 30, 2011 workshop in this proceeding, Staff provided an updated VIR lookup table to support its workshop claims (*See*: Attachment A).<sup>2</sup> The VIR for small-scale systems in the Portland area for the April 1, 2011 reservation window was 46.8 cents per kWh. Using the updated VIR lookup table, it is clear that for this rate to fully payoff a system over a 15 year period, the system would need to have an installed cost no higher than \$5.75 per watt and a loan interest rate no higher than 4.5 percent. This installed cost and interest rate are both dramatically lower than the assumptions for installed cost and interest rate many parties recommended the Commission use in setting the initial VIRs. Although some potential participants may be able achieve this level of cost and acquire a loan at this interest rate it is not clear how widespread this would be and whether this would apply to a typical participant. Even so, a VIR of 46.8 cents per kWh is not cost-effective and clearly too high when capacity reservations are being allocated in a matter of minutes, not days, weeks or months. Staff believes we are at the point in the Pilot Program where it is necessary to move beyond cost-based rates.

---

<sup>1</sup> Staff and PGE/Pacific may differ on whether the alternating use of bidding and lottery reservation should begin with bidding or lottery, but that issue is to be addressed in the second phase of this proceeding.

<sup>2</sup> Updating the VIR lookup tables from Staff’s Supplemental Comments filed on April 30, 2010 in Docket No. UM 1452.

RNP did not include its financial modeling or the specific range of VIRs it finds to be appropriate in its Opening Comments. Staff is unable to determine key input assumptions such as the installed capacity, installed cost, and loan interest rate used by RNP in its modeling. Nevertheless, Staff and RNP both recommend a 10 percent reduction in the VIRs for the October 3, 2011 reservation window.

#### Oregonians for Renewable Energy Policy

Staff and OREP only agree on a recommended VIR reduction of 10 percent for rate classes 3 and 4. OREP argues that the speed of capacity reservation is not an appropriate metric upon which to base VIR adjustments and instead recommends using the percentage of reserved systems actually installed in the 12-month period following enrollment as an adjustment metric (*See*: OREP Opening Comments at 1-2). Staff disagrees and believes both metrics are important. The choice of metrics is not either one or the other. Further, at this point in the Pilot Program, capacity is being reserved in a matter of minutes and the utilities are indicating that actual installation percentages are high.

OREP also argues that if the objective of the Pilot Program is to incent solar system installation as cheaply or cost-effectively as possible, then projects in different insolation zones should at least pencil out at the same assumed installed cost and loan interest rate (*See*: OREP Opening Comments at 2-3). Staff fails to understand why all insolation zones should pencil out at an interest rate of 3 percent and an installed cost of \$6.00 per watt. As long as reservations are being allocated and systems are being installed why does penciling out matter? With capacity reservations in rate classes 1 and 2 being allocated in a matter of minutes, Staff does believe consistency across insolation zones is sufficient reason to leave these VIRs unchanged. Staff agrees with PGE/Pacific when they argue that the dual objective of this Pilot Program is to enroll and install all of the available capacity with the lowest possible incentive rates (*See*: PGE/Pacific Opening Comments at 6).

#### Staff Recommendation

Based on the speed at which reservations were fully subscribed in the April 1, 2011 enrollment window and concern regarding the future cost of the Pilot Program and its overall impact on customer rates, Staff recommends that the Commission adopt the VIRs show in Table 1 for the next enrollment window.

**Table 1. Rebuttable Volumetric Incentive Rates for October 3, 2011  
Enrollment Window.**

Rate Class	IOU Service Counties	IOUs	Project Size	10 kW < Project
			<= 10 kW	Size <= 100kW
			\$/KWH	\$/KWH
1	Benton, Clackamas, Clatsop, Columbia, Lane, Lincoln, Linn, Marion*, Multnomah*, Polk*, Tillamook, Washington, Yamhill*	Pacific Power & PGE*	0.421	0.356
2	Coos, Douglas, Hood River	Pacific Power & PGE*	0.389	0.356
3	Gilliam, Jackson, Josephine, Klamath, Morrow, Sherman, Umatilla, Wallowa, Wasco	Pacific Power	0.389	0.356
4	Baker*, Crook, Deschutes, Jefferson, Lake, Malheur*, Hamey*	Pacific Power & Idaho Power*	0.356	0.356

This concludes Staff's Closing Comments in this VIR Update phase in Docket No. UM 1452.



---

**Maury Galbraith**  
**Electric Rates & Planning Section**

**STAFF SIMULATED VIR RATES BY RATE CLASS AND PROJECT SIZE CATEGORY**  
**STAFF STEP 8 COST ASSUMPTIONS**  
**CREATED: 29JUN11**

**Rate Class=1 Project Size Category=0 - 10 KW**

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
5	5.50	0.410	0.423	0.436	0.449	0.463	0.477	0.491
5	5.75	0.427	0.440	0.454	0.468	0.482	0.496	0.511
5	6.00	0.443	0.457	0.471	0.486	0.501	0.516	0.531
5	6.25	0.460	0.474	0.489	0.504	0.520	0.535	0.551
5	6.50	0.476	0.491	0.507	0.522	0.538	0.555	0.571
5	6.75	0.493	0.508	0.524	0.541	0.557	0.574	0.591
5	7.00	0.509	0.526	0.542	0.559	0.576	0.594	0.611

**Rate Class=1 Project Size Category=10 - 100 KW**

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
50	5.50	0.368	0.381	0.394	0.407	0.420	0.434	0.448
50	5.75	0.384	0.398	0.411	0.425	0.439	0.454	0.468
50	6.00	0.401	0.415	0.429	0.443	0.458	0.473	0.488
50	6.25	0.417	0.432	0.447	0.462	0.477	0.493	0.508
50	6.50	0.434	0.449	0.464	0.480	0.496	0.512	0.529
50	6.75	0.450	0.466	0.482	0.498	0.515	0.532	0.549
50	7.00	0.467	0.483	0.500	0.516	0.534	0.551	0.569

**Rate Class=2 Project Size Category=0 - 10 KW**

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
5	5.50	0.376	0.388	0.400	0.412	0.424	0.437	0.450
5	5.75	0.391	0.403	0.416	0.429	0.442	0.455	0.468
5	6.00	0.406	0.419	0.432	0.445	0.459	0.473	0.487
5	6.25	0.421	0.435	0.448	0.462	0.476	0.491	0.505

**STAFF SIMULATED VIR RATES BY RATE CLASS AND PROJECT SIZE CATEGORY**  
**STAFF STEP 8 COST ASSUMPTIONS**  
**CREATED: 29JUN11**

**Rate Class=2 Project Size Category=0 - 10 KW**

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
5	6.50	0.437	0.450	0.465	0.479	0.494	0.508	0.524
5	6.75	0.452	0.466	0.481	0.496	0.511	0.526	0.542
5	7.00	0.467	0.482	0.497	0.512	0.528	0.544	0.560

**Rate Class=2 Project Size Category=10 - 100 KW**

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
50	5.50	0.337	0.349	0.361	0.373	0.385	0.398	0.411
50	5.75	0.352	0.364	0.377	0.390	0.403	0.416	0.429
50	6.00	0.367	0.380	0.393	0.406	0.420	0.434	0.448
50	6.25	0.382	0.396	0.409	0.423	0.437	0.452	0.466
50	6.50	0.398	0.411	0.426	0.440	0.455	0.469	0.485
50	6.75	0.413	0.427	0.442	0.457	0.472	0.487	0.503
50	7.00	0.428	0.443	0.458	0.473	0.489	0.505	0.521

**Rate Class=3 Project Size Category=0 - 10 KW**

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
5	5.50	0.347	0.358	0.369	0.380	0.392	0.403	0.415
5	5.75	0.361	0.372	0.384	0.396	0.408	0.420	0.432
5	6.00	0.375	0.387	0.399	0.411	0.424	0.436	0.449
5	6.25	0.389	0.401	0.414	0.427	0.440	0.453	0.466
5	6.50	0.403	0.416	0.429	0.442	0.456	0.469	0.483
5	6.75	0.417	0.430	0.444	0.458	0.472	0.486	0.500
5	7.00	0.431	0.445	0.459	0.473	0.488	0.502	0.517

**STAFF SIMULATED VIR RATES BY RATE CLASS AND PROJECT SIZE CATEGORY**  
**STAFF STEP 8 COST ASSUMPTIONS**  
**CREATED: 29JUN11**

Rate Class=3 Project Size Category=10 - 100 KW

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
50	5.50	0.311	0.322	0.333	0.344	0.356	0.367	0.379
50	5.75	0.325	0.336	0.348	0.360	0.372	0.384	0.396
50	6.00	0.339	0.351	0.363	0.375	0.388	0.400	0.413
50	6.25	0.353	0.365	0.378	0.391	0.404	0.417	0.430
50	6.50	0.367	0.380	0.393	0.406	0.420	0.433	0.447
50	6.75	0.381	0.394	0.408	0.422	0.436	0.450	0.464
50	7.00	0.395	0.409	0.423	0.437	0.452	0.466	0.481

Rate Class=4 Project Size Category=0 - 10 KW

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
5	5.50	0.322	0.332	0.343	0.353	0.364	0.374	0.385
5	5.75	0.335	0.346	0.357	0.367	0.379	0.390	0.401
5	6.00	0.348	0.359	0.370	0.382	0.393	0.405	0.417
5	6.25	0.361	0.373	0.384	0.396	0.408	0.420	0.433
5	6.50	0.374	0.386	0.398	0.411	0.423	0.436	0.449
5	6.75	0.387	0.400	0.412	0.425	0.438	0.451	0.465
5	7.00	0.400	0.413	0.426	0.439	0.453	0.466	0.480

Rate Class=4 Project Size Category=10 - 100 KW

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
50	5.50	0.289	0.299	0.309	0.320	0.330	0.341	0.352
50	5.75	0.302	0.312	0.323	0.334	0.345	0.356	0.368
50	6.00	0.315	0.326	0.337	0.348	0.360	0.372	0.384
50	6.25	0.328	0.339	0.351	0.363	0.375	0.387	0.399

**STAFF SIMULATED VIR RATES BY RATE CLASS AND PROJECT SIZE CATEGORY**  
**STAFF STEP 8 COST ASSUMPTIONS**  
**CREATED: 29JUN11**

Rate Class=4 Project Size Category=10 - 100 KW

Capacity - DC (kW)	System Cost per Watt (\$/watt)	Volumetric Incentive Rate at 3.00% (\$/kWh)	Volumetric Incentive Rate at 3.50% (\$/kWh)	Volumetric Incentive Rate at 4.00% (\$/kWh)	Volumetric Incentive Rate at 4.50% (\$/kWh)	Volumetric Incentive Rate at 5.00% (\$/kWh)	Volumetric Incentive Rate at 5.50% (\$/kWh)	Volumetric Incentive Rate at 6.00% (\$/kWh)
50	6.50	0.341	0.353	0.365	0.377	0.390	0.402	0.415
50	6.75	0.354	0.366	0.379	0.391	0.404	0.418	0.431
50	7.00	0.367	0.380	0.393	0.406	0.419	0.433	0.447

**CERTIFICATE OF SERVICE**

**UM 1452**

I certify that I have this day served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated at Salem, Oregon, this 15th day of July, 2011.



---

Kay Barnes  
Public Utility Commission  
Regulatory Operations  
550 Capitol St NE Ste 215  
Salem, Oregon 97301-2551  
Telephone: (503) 378-5763

**UM 1452**  
**Service List (Parties)**

TEDDY KEIZER	1615 SE 30TH AVE PORTLAND OR 97214 teddy@goteddygo.com; teddy1a@aol.com
RAYMOND P NEFF	465-1/2 RIVER RD EUGENE OR 97404 rpneff@efn.org
<b>*OREGON DEPARTMENT OF ENERGY</b>	
ROBERT DEL MAR ENERGY ANALYST	625 MARION ST NE SALEM OR 97301-3737 robert.delmar@state.or.us
VIJAY A SATYAL SENIOR POLICY ANALYST	625 MARION ST NE SALEM OR 97301 vijay.a.satyal@state.or.us
<b>CABLE HUSTON BENEDICT HAAGENSEN &amp; LLOYD, LLP</b>	
RAYMOND S KINDLEY	1001 SW FIFTH AVENUE, SUITE 2000 PORTLAND OR 97204-1136 rkindley@cablehuston.com
<b>CITIZENS' UTILITY BOARD OF OREGON</b>	
GORDON FEIGNER ENERGY ANALYST	610 SW BROADWAY, STE 400 PORTLAND OR 97205 gordon@oregoncub.org
ROBERT JENKS EXECUTIVE DIRECTOR	610 SW BROADWAY, STE 400 PORTLAND OR 97205 bob@oregoncub.org
G. CATRIONA MCCrackEN LEGAL COUNSEL/STAFF ATTY	610 SW BROADWAY, STE 400 PORTLAND OR 97205 catriona@oregoncub.org
<b>DAVISON VAN CLEVE</b>	
IRION A SANGER ASSOCIATE ATTORNEY	333 SW TAYLOR - STE 400 PORTLAND OR 97204 mail@dvclaw.com
<b>DAVISON VAN CLEVE PC</b>	
MELINDA J DAVISON	333 SW TAYLOR - STE 400 PORTLAND OR 97204 mail@dvclaw.com
<b>DEPARTMENT OF JUSTICE</b>	
JANET L PREWITT ASSISTANT AG	NATURAL RESOURCES SECTION 1162 COURT ST NE SALEM OR 97301-4096 janet.prewitt@doj.state.or.us

<p><b>ECUMENICAL MINISTRIES OF OREGON</b></p> <p>JENNY HOLMES ENVIRONMENTAL MINISTRIES DIRECTOR</p>	<p>0245 SW BANCROFT, SUITE B PORTLAND OR 97239 jholmes@emoregon.org</p>
<p><b>ECUMENICAL MINISTRIES OF OREGON</b></p> <p>KATHLEEN NEWMAN OREGON INTERFAITH POWER &amp; LIGHT</p>	<p>1553 NE GREENSWORD DR HILLSBORO OR 97214 kathleenoipl@frontier.com; k.a.newman@frontier.com</p>
<p><b>ENERGY TRUST OF OREGON</b></p> <p>KACIA BROCKMAN</p>	<p>851 SW SIXTH AVE - STE 1200 PORTLAND OR 97204 kacia@energytrust.org</p>
<p>JOHN M VOLKMAN GENERAL COUNSEL</p>	<p>851 SW 6TH AVE SUITE 1200 PORTLAND OR 97204 john.volkman@energytrust.org</p>
<p><b>ENVIRONMENTAL LAW ALLIANCE WORLDWIDE</b></p> <p>JENNIFER GLEASON</p>	<p>1877 GARDEN AVE EUGENE OR 97403 jen@elaw.org</p>
<p><b>ESLER STEPHENS &amp; BUCKLEY</b></p> <p>JOHN W STEPHENS</p>	<p>888 SW FIFTH AVE STE 700 PORTLAND OR 97204-2021 stephens@eslerstephens.com; mec@eslerstephens.com</p>
<p><b>IDAHO POWER COMPANY</b></p> <p>RANDY ALLPHIN</p>	<p>rallphin@idahopower.com</p>
<p>CHRISTA BEARRY</p>	<p>PO BOX 70 BOISE ID 83707-0070 cbearry@idahopower.com</p>
<p>REX BLACKBURN SENIOR ATTORNEY</p>	<p>PO BOX 70 BOISE ID 83707-0070 rblackburn@idahopower.com</p>
<p>KARL BOKENKAMP GENERAL MANAGER-POWER SUPPLY PLANNING</p>	<p>PO BOX 70 BOISE ID 83707-0070 kbokenkamp@idahopower.com</p>
<p>JOHN R GALE VP - REGULATORY AFFAIRS</p>	<p>PO BOX 70 BOISE ID 83707 rgale@idahopower.com</p>
<p>JEFF MALMEN</p>	<p>PO BOX 70 BOISE ID 83707-0070 jmalmen@idahopower.com</p>

LISA D NORDSTROM ATTORNEY	PO BOX 70 BOISE ID 83707-0070 lnordstrom@idahopower.com
GREGORY W SAID DIRECTOR - REVENUE REQUIREMENT	PO BOX 70 BOISE ID 83707 gsaid@idahopower.com
MARK STOKES MANAGER, POWER SUPPLY & PLANNING	PO BOX 70 BOISE ID 83707 mstokes@idahopower.com
MICHAEL YOUNGBLOOD MANAGER, RATE DESIGN	PO BOX 70 BOISE ID 83707 myoungblood@idahopower.com
<b>MBA, LEED AP</b>  DANIEL WELDON COMMERCIAL AND RESIDENTIAL FINANCE	19790 SOUTH FERGUSON TERRACE OREGON CITY OR 97045 danweldon@bctonline.com
<b>MCDOWELL RACKNER &amp; GIBSON PC</b>  WENDY MCINDOO OFFICE MANAGER	419 SW 11TH AVE., SUITE 400 PORTLAND OR 97205 wendy@mcd-law.com
LISA F RACKNER ATTORNEY	419 SW 11TH AVE., SUITE 400 PORTLAND OR 97205 lisa@mcd-law.com
<b>MULTNOMAH COUNTY</b>  WARREN FISH	501 SE HAWTHORNE, STE 600 PORTLAND OR 97214 warren.fish@co.multnomah.or.us
<b>MULTNOMAH COUNTY COMMISSIONER</b>  COMMISSIONER JEFF COGEN	501 SE HAWTHORNE, STE 600 PORTLAND OR 97214 district2@co.multnomah.or.us
<b>OREGON AFL-CIO</b>	2110 STATE ST SALEM OR 97301 afl-cio@oraficio.org; duke@oraficio.org
JOHN BISHOP	1635 NW JOHNSON ST PORTLAND OR 97209 jbishop@mbjlaw.com
<b>OREGON DISTRICT COUNCIL OF LABOERS</b>  BEN NELSON	10245 SE HOLGATE BLVD PORTLAND OR 97266 nrocnelson@qwest.net

<b>OREGON DISTRICT COUNCIL OF LABORERS'</b>  MELODY GUY	   melodyg@qwestoffice.net
<b>OREGONIANS FOR RENEWABLE ENERGY PAYMENTS</b>  JUDY BARNES	1425 SE 37TH PORTLAND OR 97214 jbarnes@hevanet.com
MARK PETE PENGILLY	PO BOX 10221 PORTLAND OR 97296 mpengilly@gmail.com
<b>PACIFICORP</b>  RYAN FLYNN	825 NE MULTNOMAH, SUITE 1800 PORTLAND OR 97232 ryan.flynn@pacificorp.com
<b>PACIFICORP, DBA PACIFIC POWER</b>  OREGON DOCKETS	825 NE MULTNOMAH ST, STE 2000 PORTLAND OR 97232 oregondockets@pacificorp.com
<b>PGE RATES &amp; REGULATORY AFFAIRS</b>	PORTLAND GENERAL ELECTRIC COMPANY 121 SW SALMON STREET, 1WTC0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com
<b>PORTLAND GENERAL ELECTRIC COMPANY</b>  J RICHARD GEORGE	121 SW SALMON ST 1WTC1301 PORTLAND OR 97204 richard.george@pgn.com
<b>PUBLIC UTILITY COMMISSION OF OREGON</b>  MOSHREK SOBHY	PO BOX 2148 SALEM OR 97308 moshrek.sobhy@state.or.us
<b>PUC STAFF--DEPARTMENT OF JUSTICE</b>  STEPHANIE S ANDRUS	BUSINESS ACTIVITIES SECTION 1162 COURT ST NE SALEM OR 97301-4096 stephanie.andrus@state.or.us
<b>RENEWABLE NORTHWEST PROJECT</b>  MEGAN WALSETH DECKER	917 SW OAK, STE 303 PORTLAND OR 97205 megan@rnp.org

<b>SOLAR ENERGY SOLUTIONS, INC.</b>  ANDREW KOYAANISQATSI	3730 SE LAFAYETTE CT PORTLAND OR 97202 andrew@solarenergyoregon.com
<b>SOUTHEAST UPLIFT NEIGHBORHOOD COALITION</b>  TIM O'NEIL	3534 SE MAIN ST PORTLAND OR 97212 tim@southeastuplift.org
<b>SUNEDISON</b>  JOE HENRI (US MAIL)	12500 BALTIMORE AVE BELTSVILLE MD 20705
<b>SUSTAINABLE SOLUTIONS UNLIMITED LLC</b>  STEVEN MCGRATH	1339 SE 8TH AVE # B PORTLAND OR 97214 steve@solutions21st.com