

Oregon RPS Rulemaking

Advisory Committee Meeting #1



Oregon Department of Energy
July 20, 2010

Agenda

A. Introductions

B. Overviews of legislative directives

C. Information/Discussion

- National Certification Organization - low impact hydropower

D. Future meeting schedule

A. Introductions

1. Committee Members
2. Other stakeholders
3. ODOE staff

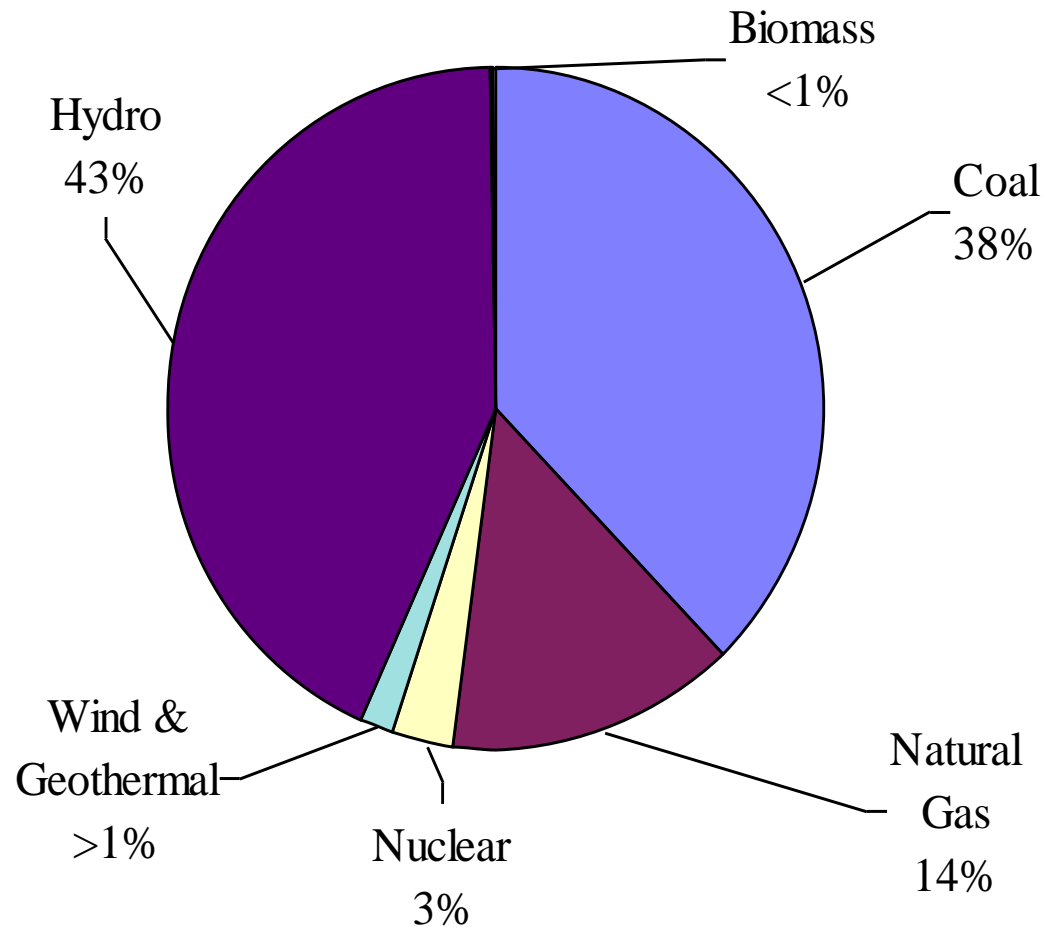
Committee Members

Members of 2010 RPS Advisory Committee	
Jeff Bissonnette	Citizens Utility Board (CUB)
Ellie Booth	Covanta Energy
Linc Cannon	Oregon Forest Industries Council (OFIC)
Megan Walseth Decker	Renewable Northwest Project (RNP)
Ryan Flynn	PacifiCorp
Gary Marcus	Falls Creek Hydroelectric Project
Brendan McCarthy	Portland General Electric (PGE)
Kate Miller	Trout Unlimited
Glenn Montgomery	Oregon Solar Energy Industries Association (OSEIA)
Tom O'Connor	Oregon Municipal Electric Utilities Association (OMEU)
Rick Oliver	Central Lincoln PUD (for OPUDA)
Doris Penwell	Association of Oregon Counties (AOC)
Zabyn Towner	PNGC Power
Paul Woodin	Community Renewable Energy Association (CREA)
Alternates to Members of the Advisory Committee	
Rebecca Brown	Portland General Electric (PGE)
Lisa Brown	Waterwatch of Oregon (for Trout Unlimited)
Sandra	Real Energy Solutions (for OSEIA)

B. Overviews

- Oregon's Electricity
- Vintage RPS, aka SB 838
- HB 3649: pre-95 hydropower
- HB 3039: PV 2:1 value REC output
- HB 3674: pre-95 biomass; MSW; NH3

Oregon Electricity – 2007*



- 49.3 million MWh
- 10% more than 2005
- PGE only utility close to state mix

* REC transactions ignored.

Oregon RPS

RPS Class	Share of Sales	Affected Utilities and Electricity Service Suppliers	Standard as of Year			
			2011	2015	2020	2025
Large Utilities	$\geq 3\%$	Eugene Water & Elec. Board PacifiCorp (Pacific Power) Portland General Electric	5%	15%	20%	25%
Smaller Utilities	$< 3\%$ but $\geq 1.5\%$	Central Lincoln PUD Clatskanie PUD Idaho Power Co. McMinnville Water & Light Springfield Utility Board Umatilla Electric Coop	No Interim Obligations			10%
Smallest Utilities	$< 1.5\%$	All other utilities, i.e. 31 consumer-owned utilities				5%
ESS	Any	Any Electricity Service Supplier (ESS)	An aggregate obligation as if each of the customers served by the ESS were served by that customer's usual host utility. 7			

1 MWh of Qualified Electricity per Oregon RPS = 1 REC

Tracking RECs

- Generating unit must be registered in WREGIS (electronic tracking system) for energy to accumulate RECs
- Once registered in WREGIS, Oregon Dept. of Energy must certify GU for RECs to qualify for Oregon RPS
- GU Owner registers with WREGIS and contacts ODOE to begin certification process, which can occur simultaneously
- Once registered WREGIS allow REC creation 3 months prior to registration

Unbundled and Bundled RECs

Unbundled

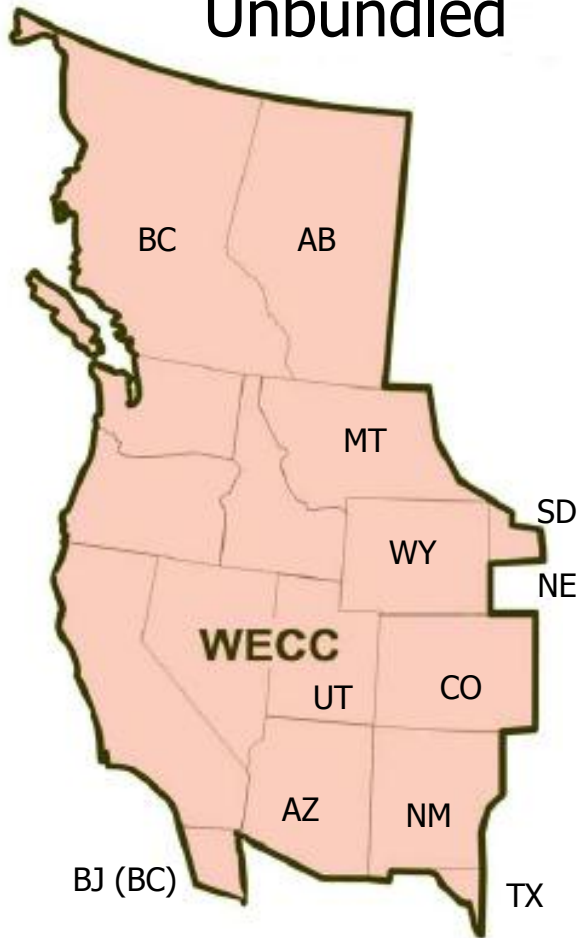
- Represents only the right to the 'renewable' claim on power
- Can originate from entire WECC (see map)
- Large IOU capped at no greater than 20% year
- Large COU capped at no greater than 50% (to 2020)
- ESS not capped

Bundled

- A bundled REC represents the actual power and right to claim renewable
- Bundled RECs must originate from the US WECC only (see map)

RPS' REC Geography

Unbundled



Bundled



BPA renewable product – no site constraint

2010 Eligibility Changes

- Low-impact hydro
- Some pre-1995 biomass, MSW, anhydrous ammonia
- Solar FIT 2 for 1 credit

Eligibility

I	BPA designated environmentally-preferred power (or any future BPA product that serves as their renewable energy power choice)		
II	Generating Facilities in Operation before January 1, 1995		
	Hydro	Up to 50 average megawatts (aMW) may be credited each compliance year if owned by an Oregon utility (<i>OR OTHER ENTITY</i>) and certified low-impact.	
	Hydro	Incremental output due to efficiency upgrades on or after 1-1-95 (if a federally-owned BPA dam only Oregon's allocated share is eligible).	
	<i>Biomass</i>	<i>PURPA-like GU, in OREGON; delayed REC use.</i>	
	Other	Incremental output due to capacity or efficiency upgrades on or after 1-1-95.	
III	Generating Facilities in Operation on or after January 1, 1995		
	Geothermal	Biomass (and byproducts) <i>""*</i>	
	Hydroelectric *	organic waste	spent pulping liquor
	Solar, PV and Thermal	dedicated energy crops	woody debris, hardwood ^
	Wave, Tidal, Ocean Thermal	digester biogas	agricultural wastes
	Wind	Other sources defined by ODOE rulemaking.	
	* - Facilities located outside of certain protected areas.		
	^ - Defined by harvesting criteria. <i>""* - MSW, COMBUSTION OK, CAPPED</i>		
IV	Electricity from hydrogen derived from any of the above resources qualifies for the RPS.		

Note: Nuclear fission and fossil fuel sources are prohibited in all cases as resources to meet the RPS.

Chronology

- 1/1/1995 Oldest eligible Generating Units (some exceptions)
- 1/1/2007 First eligible REC output (i.e., banking allowed)
- 6/17/2007 Oregon RPS signed into law (SB 838)
- 6/26/2007 WREGIS on-line
- 2/6/2008 First GU accepted for Oregon RPS (Elkhorn Wind, Union County)
- 1/1/2011 First Compliance Year Begins (PGE, PacifiCorp, EWEB)
- 3/31/2012 Complete 2011 True-Up

HB 3649: pre-95 hydro

- Allows non-utility, pre-1995 Oregon facilities if certified as low-impact hydro.
- Parallels original SB 838 language for utility-owned, pre-1995, low-impact.
- More during Info/Discuss segment (after overviews & break)

HB 3039: PV 2:1 REC

- Solar Feed-in Tariff (pilot)
- 'Large' PV requirement for Oregon IOUs
 - At least 20 MW total by Jan. 2020
 - PUC Divided 20 MW
 - PGE 10.9 MW
 - PacifiCorp 8.7 MW
 - Idaho Power 0.5 MW
 - Site capacity must be at least 500 kW but no greater than 5 MW
 - Each REC from a facility physically located in Oregon receives double RPS credit

HB 3674

- Allows pre-1995 PURPA biomass-fueled GU *if* located in Oregon.
- Allows generation from pre-1995 MSW via combustion process:
 - Energy allowed capped at 11 aMW
- Output eligible from 1/1/2011 forward.
 - Due to WREGIS 'look back' RPS certification must wait until April 2011
- REC output cannot be used until 2026.

HB 3674 continued

- Allows generation from new MSW facilities via combustion process:
 - Energy allowed capped at 9 aMW
- REC output available for retirement under FIFO (first-in, first-out) rule.

HB 3674 continued

- Allows new facilities which produce electricity from identified sources via an ammonia & hydrogen process:
- Output eligible from 1/1/2011 forward
 - Due to WREGIS 'look back' RPS certification must wait until April 2011
- REC output available for retirement under FIFO rule.

BREAK

C. Info/Discuss

- Low-impact Certification
- HB 3649 Section 1(4), modifying ORS 469A.020(4)
- "...certified as a low-impact hydro-electric facility...by a national certification organization recognized by the State Department of Energy by rule..."

Low-impact Hydropower

- Low Impact Hydro Institute (LIHI)
- non-profit established 1999
- Institute's Governing Board an Advisory Panel includes members from
 - BEF, NRDC , UCS, PGE, BPA, US Dept of Fish and Wildlife, and others.

LIHI process

Satisfy Following Criteria

1. River flows,
2. Water quality,
3. Fish passage and protection,
4. Watershed protection
5. Threatened and endangered species protection,
6. Cultural resource protection,
7. Recreation, and
8. Facilities recommended for removal.

Future Meeting Schedule

- Tuesdays
- August 10
- August 31
- September 21
- October 12

Oregon RPS contacts

- More on the Oregon RPS (w/ links to OPUC):

www.oregon-RPS.org

- OPUC HB 3039

www.leg.state.or.us/09reg/measpdf/hb3000.dir/hb3039.en.pdf

- ODOE homepage:

<http://www.energy.state.or.us>

- Kip Pheil (ODOE):

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If conservation is the ounce of prevention;
an RPS is the pound of cure.