

Bill Bradbury
Chair
Oregon

Henry Lorenzen
Oregon

W. Bill Booth
Idaho

James A. Yost
Idaho



Jennifer Anders
Vice Chair
Montana

Pat Smith
Montana

Tom Karier
Washington

Phil Rockefeller
Washington

October 29, 2013

MEMORANDUM

TO: Council Members

FROM: Shirley Lindstrom

SUBJECT: Briefing on renewable resource development in Idaho

Mark Stokes, Power Supply Planning, Idaho Power Company will make a presentation on renewable resources in the Idaho Power service territory.



Mark Stokes

Idaho Power Service Area and Resources

Hydroelectric Facilities and Nameplate Capacities

1	Hells Canyon	391.5 MW
2	Oxbow	190.0 MW
3	Brownlee	585.4 MW
4	Cascade	12.4 MW
5	Swan Falls	27.2 MW
6	C. J. Strike	82.8 MW
7	Bliss	75.0 MW
8	Lower Malad	13.5 MW
9	Upper Malad	8.3 MW
10	Lower Salmon	60.0 MW
11	Upper Salmon	34.5 MW
12	Thousand Springs	8.8 MW
13	Clear Lake	2.5 MW
14	Shoshone Falls	12.5 MW
15	Twin Falls	52.9 MW
16	Milner	59.4 MW
17	American Falls	92.3 MW
Total		1,709.0 MW

Thermal Facilities And Capacities

Coal

▲ Jim Bridger	770.5 MW*
▲ North Valmy	283.5 MW*
▲ Boardman	64.2 MW*

Total 1,118.2 MW

Natural Gas

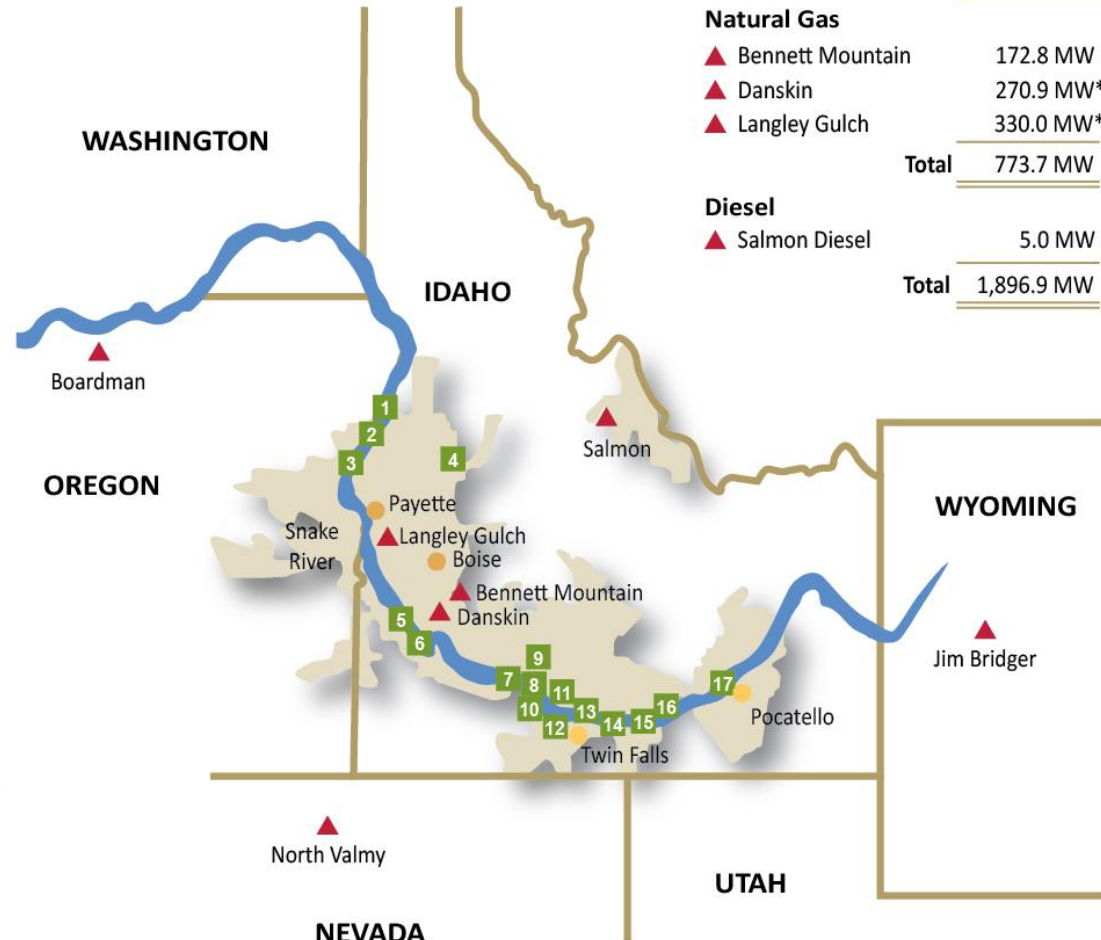
▲ Bennett Mountain	172.8 MW
▲ Danskin	270.9 MW**
▲ Langley Gulch	330.0 MW***

Total 773.7 MW

Diesel

▲ Salmon Diesel	5.0 MW
-----------------	--------

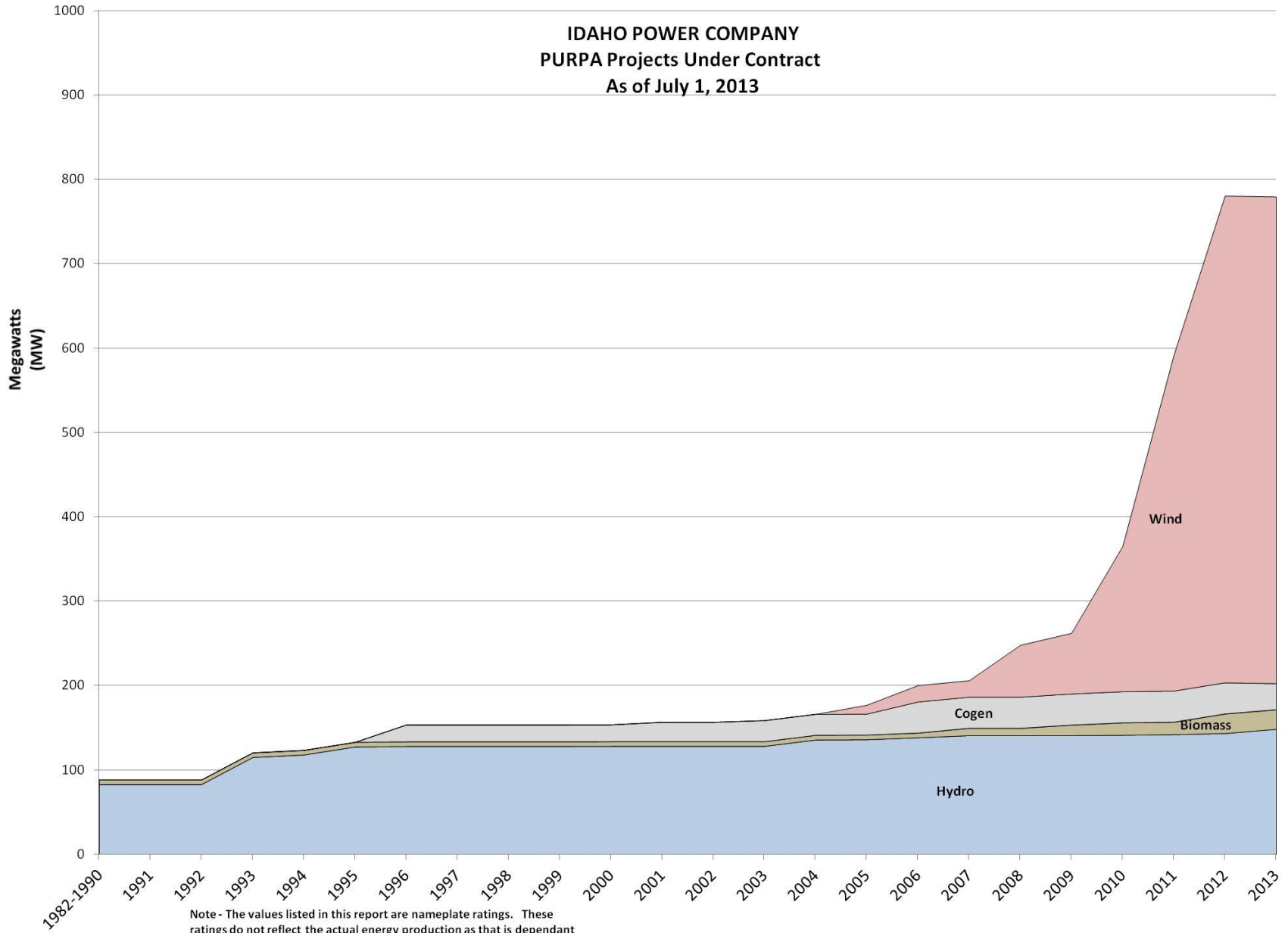
Total 1,896.9 MW



* Idaho Power Co. Share ** Danskin *** Winter Capacity

PURPA and Wind Generation

IDAHO POWER COMPANY
PURPA Projects Under Contract
As of July 1, 2013



Note - The values listed in this report are nameplate ratings. These ratings do not reflect the actual energy production as that is dependant upon the availability of the projects fuel source.

PURPA by State/Utility

PURPA Nameplate by State and Utility (MW)

	ID	OR	MT	UT	WA	WY	CA	Total
Idaho Power	940	28	21					989
PacifiCorp	65	167		179	6	378	20	815
Avista	7				95			102
Northwestern Energy			351					351
Portland General Electric		14						14
Puget Sound Energy					44			44

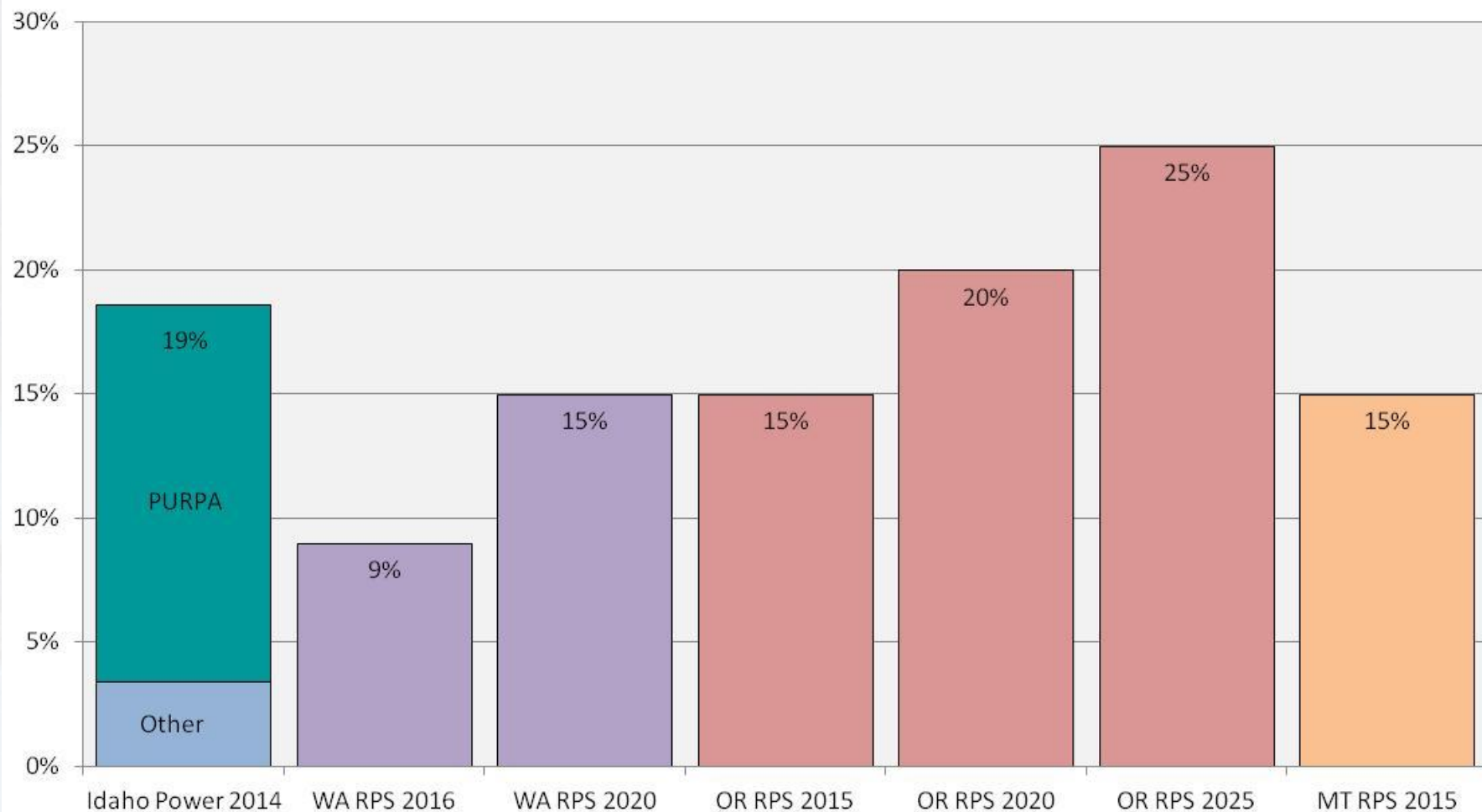
2011 Annual Average Load by State and Utility (aMW)

	ID	OR	MT	UT	WA	WY	CA	Total
Idaho Power	1,771	87						1,858
PacifiCorp	386	1,526		2,735	468	1,133	94	6,342
Avista	382				714			1,096
Northwestern Energy			733					733
Portland General Electric		2,403						2,403
Puget Sound Energy					2,507			2,507

PURPA Percentage of Average Load by State and Utility

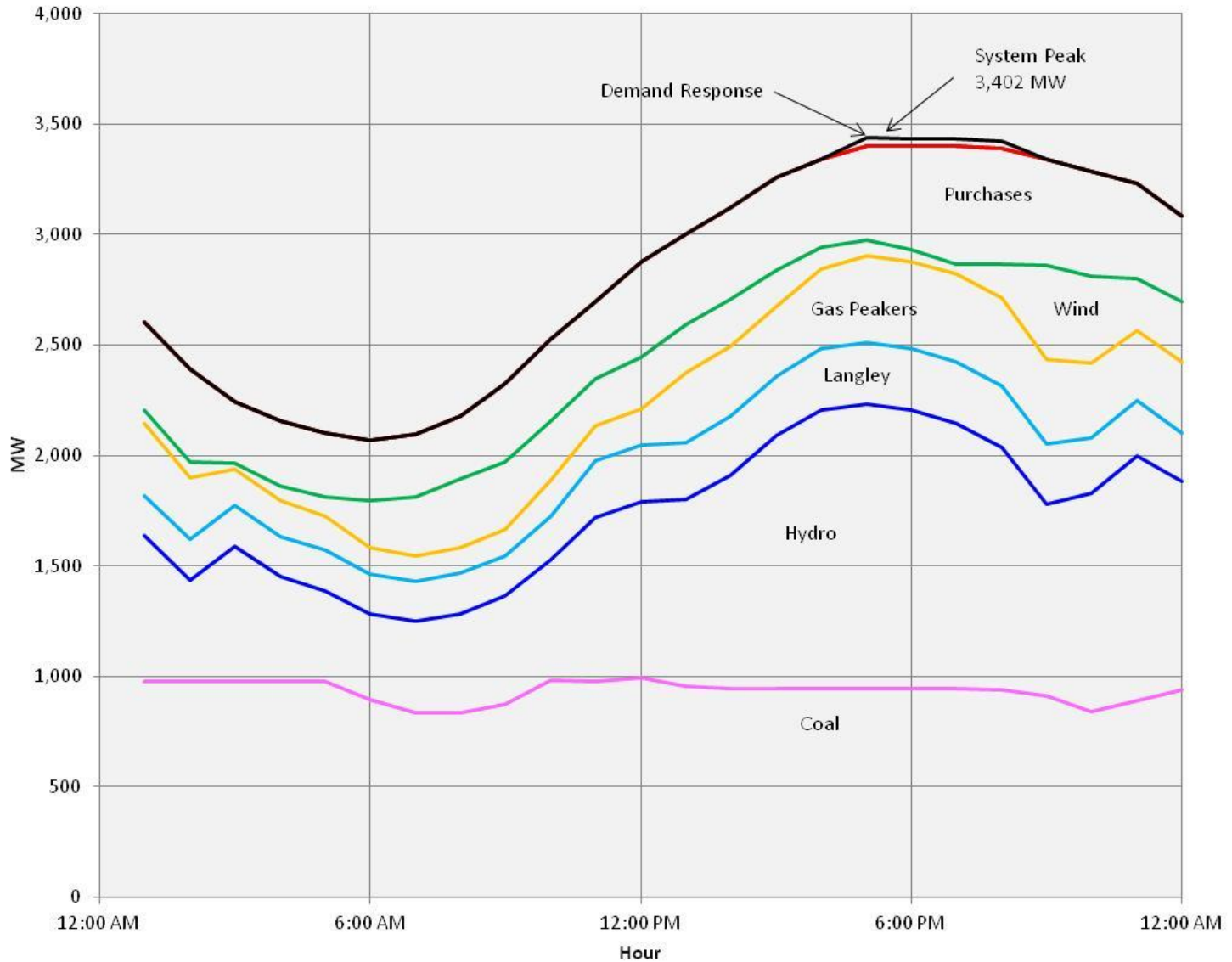
	ID	OR	MT	UT	WA	WY	CA	Total
Idaho Power	53.1%	32.2%						53.2%
PacifiCorp	16.8%	10.9%		6.5%	1.3%	33.4%	21.3%	12.9%
Avista	1.8%				13.3%			9.3%
Northwestern Energy			47.9%					47.9%
Portland General Electric		0.6%						0.6%
Puget Sound Energy					1.8%			1.8%

Idaho Power Compared to Regional Renewable Portfolio Standards



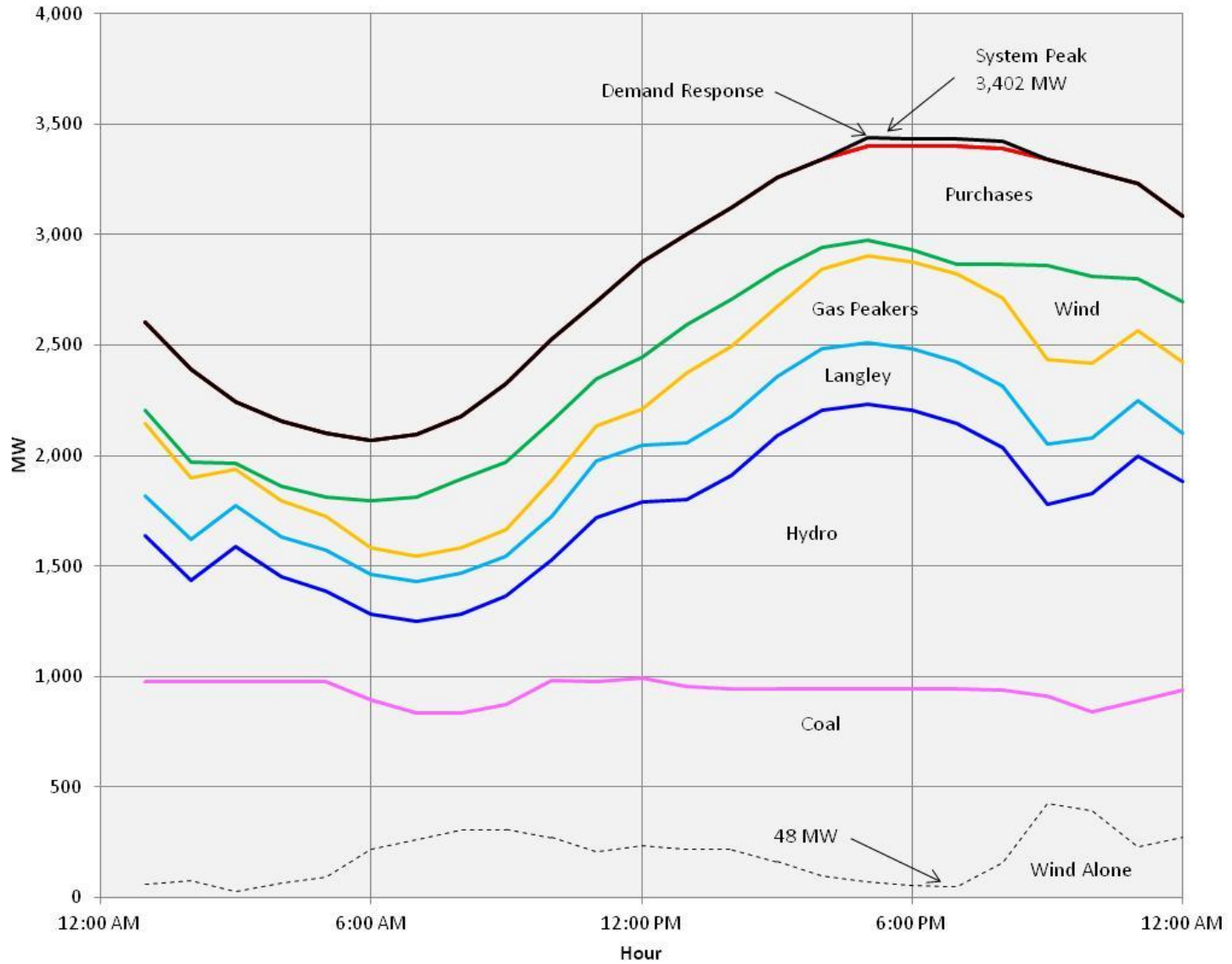
Generation Mix July 1, 2013

Boise High Temperature 110 degrees



Generation Mix July 1, 2013

Boise High Temperature 110 degrees



Generation Capability of Avista-Owned Resources and Service Territory



HYDROELECTRIC		GENERATION CAPABILITY (MW)
1	Noxon Rapids (Noxon, MT)	562.4
2	Cabinet Gorge (Clark Fork, ID)	273.0
3	Long Lake (Spokane, WA)	88.0
4	Little Falls (Spokane, WA)	35.6
5	Nine Mile (Spokane, WA)	22.4
6	Post Falls (Post Falls, ID)	15.4
7	Monroe Street (Spokane, WA)	15.0
8	Upper Falls (Spokane, WA)	10.2
Total Hydroelectric Capability		1,022.0

THERMAL		GENERATION CAPABILITY (MW)
9	Coyote Springs 2 (Boardman, OR)	284.4
10	Colstrip (Units 3 & 4) (Colstrip, MT)	222.0
11	Rathdrum Combustion Turbines (Rathdrum, ID)	166.5
12	Northeast Combustion Turbines (Spokane, WA)	64.8
13	Kettle Falls Biomass Plant (Kettle Falls, WA)	53.5
14	Boulder Park (Spokane, WA)	24.0
15	Kettle Falls Combustion Turbine (Kettle Falls, WA)	6.9
Total Thermal Capability		822.1

TOTAL OWNED GENERATING CAPABILITY 1,844.1
(as of 12/31/12)

NON UTILITY-OWNED OR OPERATED		GENERATION CAPABILITY (MW)
16	Lancaster N.G.-fired (Rathdrum, ID)	270
17	Palouse Wind (Oaksdale, WA)	105
18	Stateline Wind Farm (Touchet, WA)	35

SERVICE TERRITORY	
●	Electric and Natural Gas
○	Natural Gas

Our WIND ENERGY Resources

PacifiCorp is dedicated to providing safe and reliable electric service to our more than 1.8 million customers, and acquiring cost-effective resources to meet customers' growing electricity needs. Our pioneering commitment to renewable energy began in the early 1980s with a demonstration wind project along the Oregon Coast and construction of the nation's first geothermal electric generating plant outside of California in 1984 – our Blundell facility near Milford, Utah.

Through our resource planning process, PacifiCorp continues to identify cost-effective energy resources. Our acquisitions in recent years have included significant amounts of company-owned and contracted wind energy resources. PacifiCorp is the second-largest rate-regulated owner of wind-powered generation in the entire nation



(behind our sister utility, MidAmerican Energy Company), according to the American Wind Energy Association. In addition, our nationally recognized Blue SkySM Green-e Energy Certified renewable energy program provides an easy and convenient option for customers who wish to support even more renewable energy in the region, separate from PacifiCorp's diverse resource mix.

- PacifiCorp has more than 1,800 megawatts of owned and purchased wind generation capability. The company owns more than 1,000 megawatts, and we have long-term purchase agreements for more than 800 megawatts from wind projects owned by others. Since 2006, our owned and contracted wind-powered generation capability has increased by a total of more than 1,400 megawatts.
- Wind, hydro, geothermal and other non-carbon emitting resources currently make up more than 20 percent of the generating capability of all PacifiCorp-owned resources, accounting for about 17 percent of our total energy output.
- Our planning and investment in cost-effective wind energy has provided valuable tax revenues, jobs and other benefits for our customers and the communities we serve. It also has positioned the company to meet renewable portfolio standards and/or carbon reduction initiatives enacted in four of the six states within our service area. Our wind-powered resources help address potential future federal policies as well.

PacifiCorp serves more than 1.8 million electric customers in six western states, operating as Pacific Power in Oregon, Washington and California, and as Rocky Mountain Power in Utah, Wyoming and Idaho.

PacifiCorp's owned wind projects

- Goodnoe Hills, 94 megawatts, near Goldendale, Washington
- Marengo, 140.4 megawatts, near Dayton, Washington
- Marengo II, 70.2 megawatts, near Dayton, Washington
- Leaning Juniper I, 100.5 megawatts, near Arlington, Oregon
- Foote Creek I, 40.8 megawatts, in Carbon County, Wyoming (The company owns a 32.1-megawatt share of the facility.)
- Glenrock, 99 megawatts, near Glenrock, Wyoming
- Rolling Hills, 99 megawatts, near Glenrock, Wyoming
- Glenrock III, 39 megawatts, near Glenrock, Wyoming (The Glenrock, Rolling Hills and Glenrock III wind projects are located on a portion of a reclaimed surface coal mine.)
- Seven Mile Hill, 99 megawatts, near Medicine Bow, Wyoming
- Seven Mile Hill II, 19.5 megawatts, near Medicine Bow, Wyoming
- High Plains, 99 megawatts, near McFadden, Wyoming
- McFadden Ridge I, 28.5 megawatts, near McFadden, Wyoming
- Dunlap I, 111 megawatts, near McFadden, Wyoming

Some of the renewable energy attributes associated with PacifiCorp's owned wind projects and power purchased from contracted wind projects may be used to comply with state renewable portfolio standards or other regulatory requirements, or sold to third parties in the form of renewable energy credits or other environmental commodities.

Power purchased from wind projects owned by others

(PacifiCorp purchases 100 percent of the output from each project.)

- Wolverine Creek, 64.5 megawatts, near Idaho Falls, Idaho

- Meadow Creek Project – Five Pine, 40 megawatts, near Idaho Falls, Idaho*
- Meadow Creek Project – North Point, 80 megawatts, near Idaho Falls, Idaho*
- Power County Wind Park North, 22.5 megawatts, near American Falls, Idaho*
- Power County Wind Park South, 22.5 megawatts, near American Falls, Idaho*
- Chevron Casper Wind Farm, 16.5 megawatts, near Casper, Wyoming
- Top of the World, 200.2 megawatts, near Glenrock, Wyoming
- Rock River I, 49 megawatts, near Rock River, Wyoming
- Combine Hills I, 41 megawatts, near Milton-Freewater, Oregon
- Spanish Fork Wind Park 2, 18.9 megawatts, near Spanish Fork, Utah*
- Mountain Wind Power, 60.9 megawatts, near Piedmont, Wyoming
- Mountain Wind Power II, 79.8 megawatts, near Piedmont, Wyoming
- Three Buttes Windpower, 99 megawatts, near Glenrock, Wyoming
- Butter Creek Power, 4.95 megawatts, near Hermiston, Oregon*
- Oregon Trail Windfarm, 9.9 megawatts, near Hermiston, Oregon*
- Ward Butte Windfarm, 6.6 megawatts, near Hermiston, Oregon*
- Wagon Trail, 3.3 megawatts, near Hermiston, Oregon*
- Big Top, 1.65 megawatts, near Hermiston, Oregon*
- Sand Ranch Windfarm, 9.9 megawatts, near Hermiston, Oregon*
- Pacific Canyon Windfarm, 8.25 megawatts, near Hermiston, Oregon*
- Four Corners Windfarm, 10 megawatts, near Hermiston, Oregon*
- Four Mile Canyon Windfarm, 10 megawatts, near Hermiston, Oregon*
- Threemile Canyon Wind I, 9.9 megawatts, near Boardman, Oregon*

* PacifiCorp does not hold title to renewable energy credits from these facilities.

