

Section 3
Annual OY 2004 – 2013
Average Energy in Megawatts

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Table A-1
Total Retail Loads
Annual OY 2004 – 2013
Average Energy in Megawatts

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Loads and Resources Information System

**Table A-1: Pacific Northwest Total Retail Loads
PNW Loads and Resource Study
2004 - 2013 Operating Years
2002 White Book**

9/9/2003

<i>Average Energy in Megawatts</i>	2004 Avg.	2005 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	2013 Avg.
Firm Loads										
-Federal Entities-										
1 Federal Entities	126	127	128	129	129	130	130	131	131	132
2 Total Federal Entities	126	127	128	129	129	130	130	131	131	132
-U.S. Bureau of Reclamation-										
3 U.S. Bureau of Reclamation	148	148	148	148	148	148	148	148	148	148
4 Total U.S. Bureau of Reclamation	148	148	148	148	148	148	148	148	148	148
-Direct Service Industry-										
5 Direct Service Industry	792	792	792	792	792	792	792	792	792	792
6 Total Direct Service Industry	792	792	792	792	792	792	792	792	792	792
-Generating Public Entities-										
7 Generating Public Entities	5071	5166	5242	5368	5441	5528	5599	5668	5746	5850
8 Total Generating Public Entities	5071	5166	5242	5368	5441	5528	5599	5668	5746	5850
-Non-Generating Public Entities-										
9 Non-Generating Public Entities	3388	3451	3504	3574	3621	3683	3735	3787	3850	3915
10 Total Non-Generating Public Entities	3388	3451	3504	3574	3621	3683	3735	3787	3850	3915
-Investor-Owned Entities-										
11 Investor-Owned Entities	10743	10950	11143	11341	11613	11868	12078	12294	12496	12750
12 Total Investor-Owned Entities	10743	10950	11143	11341	11613	11868	12078	12294	12496	12750
-Other Firm Loads-										
13 Other PNW Entities	180	180	180	180	180	180	180	180	180	180
14 Total Other Firm Loads	180	180	180	180	180	180	180	180	180	180
- Total Regional Firm Loads-										
15 Federal Entities	274	275	276	277	277	278	278	279	279	280
16 Direct Service Industry	792	792	792	792	792	792	792	792	792	792
17 Public Entities	8459	8617	8746	8942	9061	9210	9334	9456	9596	9766
18 Investor-Owned Entities	10743	10950	11143	11341	11613	11868	12078	12294	12496	12750
19 Other Entities	180	180	180	180	180	180	180	180	180	180
20 Total Regional Firm Loads	20449	20814	21137	21532	21924	22328	22662	23000	23343	23767
Non-Firm Loads										
-Investor-Owned Entities-										
21 Investor-Owned Entities	151	151	151	151	151	151	151	151	151	151
22 Total Investor-Owned Entities	151	151	151	151	151	151	151	151	151	151
- Total Regional Non-Firm Loads-										
23 Federal Entities	0	0	0	0	0	0	0	0	0	0
24 Direct Service Industry	0	0	0	0	0	0	0	0	0	0
25 Public Entities	0	0	0	0	0	0	0	0	0	0
26 Investor-Owned Entities	151	151	151	151	151	151	151	151	151	151
27 Total Regional Non-Firm Loads	151	151	151	151	151	151	151	151	151	151
- Total Regional Medium Loads-										
28 Federal Entities	274	275	276	277	277	278	278	279	279	280
29 Direct Service Industry	792	792	792	792	792	792	792	792	792	792
30 Public Entities	8459	8617	8746	8942	9061	9210	9334	9456	9596	9766
31 Investor-Owned Entities	10894	11100	11294	11491	11764	12019	12229	12444	12647	12900
32 Other Entities	180	180	180	180	180	180	180	180	180	180
33 Total Regional Medium Loads	20599	20964	21288	21682	22074	22479	22813	23151	23494	23918

Table A-2
Exports
Annual OY 2004 – 2013
Average Energy in Megawatts

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**Table A-2: Regional Exports
PNW Loads and Resource Study
2004 - 2013 Operating Years
2002 White Book**

9/9/2003

<i>Average Energy in Megawatts</i>	2004 Avg.	2005 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	2013 Avg.
-Exports East of Continental Divide-										
1 AVWP To OEOR PwrS	2.5	1	1	1	1	1	1	1	1	1
2 BPA To Other Entities	75	78	81	84	88	91	95	99	102	107
3 Total Exports To ECD	77	79	82	85	89	92	96	100	103	108
-Exports to Pacific Southwest-										
4 BPA To ANHM PwrX	5	3.3	0	0	0	0	0	0	0	0
5 BPA To AZUS CapS	0.4	0	0	0	0	0	0	0	0	0
6 BPA To AZUS PwrS	0.2	0	0	0	0	0	0	0	0	0
7 BPA To BANN CapS	0.1	0	0	0	0	0	0	0	0	0
8 BPA To BANN PwrS	0.1	0	0	0	0	0	0	0	0	0
9 BPA To BART PwrS	40	40	37	0	0	0	0	0	0	0
10 BPA To BURB C/N/X	3.8	3.8	3.8	3.8	2.5	0	0	0	0	0
11 BPA To CLTN CapS	0.4	0	0	0	0	0	0	0	0	0
12 BPA To CLTN PwrX	0.2	0	0	0	0	0	0	0	0	0
13 BPA To GLEN C/N/X	4.2	4.2	4.2	4.2	2.7	0	0	0	0	0
14 BPA To MSR PwrS	75	75	15	0	0	0	0	0	0	0
15 BPA To Other Entities	218	175	204	35	0	0	0	0	0	0
16 BPA To PASA C/N/X	2.5	2.5	2.5	2.5	1.6	0	0	0	0	0
17 BPA To PASA C/N/X	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
18 BPA To PASA S/N/X	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
19 BPA To RVSD CapS	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0	0	0
20 BPA To RVSD C/N/X	2.8	2.8	2.8	2.8	2.8	1.7	0	0	0	0
21 BPA To RVSD C/N/X	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
22 BPA To RVSD S/Pwr/X	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
23 IPC To AZUS PwrS	1.2	0	0	0	0	0	0	0	0	0
24 IPC To BANN PwrS	0.4	0	0	0	0	0	0	0	0	0
25 IPC To CLTN PwrS	1.2	0	0	0	0	0	0	0	0	0
26 PGE To BURB PwrS	2.4	0	0	0	0	0	0	0	0	0
27 PGE To GLEN PwrS	20	20	20	20	20	20	20	20	20	3.3
28 PGE To GLEN S/Pwr/X	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.5	0
29 PPL To CDWR PwrS	70	30	0	0	0	0	0	0	0	0
30 PPL To SCE PwrS	54	54	54	9	0	0	0	0	0	0
31 PPL To SMUD PwrS	40	40	40	40	40	40	40	40	40	40
32 PSE To PGS S/Pwr/X	47	47	47	24	0	0	0	0	0	0
33 SCL To NCPA S/Pwr/X	10	10	10	10	10	10	10	10	10	10
34 SDGE To SDGE PwrS	57	57	57	57	57	57	57	57	57	57
35 SHPD To SMUD PwrS	29	29	29	29	6	0	0	0	0	0
36 TID To TID PwrS	39	39	39	39	39	39	39	39	39	39
37 BPA NW-SW Intertie Losses	11	9.6	8.5	1.9	0.7	0.5	0.4	0.3	0.3	0.3
38 Total Exports To PSW	751	659	590	294	199	185	183	180	178	160
-Exports to Inland Southwest-										
39 BPA To SPP PwrS	60	60	60	60	60	60	60	60	60	60
40 CIDF To UPLC PwrS	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
41 IPC To UAMP PwrS	17	0	0	0	0	0	0	0	0	0
42 LVFBR To WAPA PwrS	36	36	36	36	36	36	36	36	36	36
43 PPL To WAPA PwrS	111	89	0	0	0	0	0	0	0	0
44 Total Exports To ISW	228	189	100	100	100	100	100	100	100	100
-Exports to Canada-										
45 BPA To BCHP CanEnt	537	537	535	532	529	527	524	524	524	524
46 Total Exports To Canada	537	537	535	532	529	527	524	524	524	524
-Exports to Other Entities-										
47 Total Exports To Other Entities	0	0	0	0	0	0	0	0	0	0
-Total Exports-										
48 Federal Entities	1049	1005	968	740	701	694	693	694	697	702
49 Public Entities	82	82	82	82	59	53	53	53	53	53
50 Investor-Owned Entities	427	341	222	153	121	121	121	121	119	101
51 Other Entities	36	36	36	36	36	36	36	36	36	36
52 Total Exports.	1594	1464	1307	1011	917	904	903	903	906	892

Table A-3
Regulated Hydro Projects
Annual OY 2004 – 2013
Average Energy in Megawatts

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**Table A-3: Regional Regulated Hydro Projects
PNW Loads and Resource Study
2004 - 2013 Operating Years
1937 Water Year
2002 White Book**

9/9/2003

Average Energy in Megawatts	2004 Avg.	2005 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	2013 Avg.
-Regulated Hydro Projects-										
1 Albeni Falls	25	25	25	25	25	25	25	25	25	25
2 Alder	21	21	21	21	21	21	21	21	21	21
3 Bonneville	341	341	343	343	345	345	345	345	345	345
4 Boundary	332	332	332	332	332	332	332	332	332	332
5 Box Canyon	48	48	48	48	48	48	48	48	48	48
6 Brownlee	235	235	235	235	235	235	235	235	235	235
7 Cabinet Gorge	85	85	85	85	85	85	85	85	85	85
8 Chelan	44	44	44	44	44	44	44	44	44	44
9 Chief Joseph	1061	1062	1066	1073	1089	1095	1101	1105	1105	1105
10 Cushman 1	14	14	14	14	14	14	14	14	14	14
11 Cushman 2	29	29	29	29	29	29	29	29	29	29
12 Diablo	79	79	79	79	79	79	79	79	79	79
13 Dworshak	126	126	126	126	127	127	127	127	127	127
14 Faraday	20	20	20	20	20	20	20	20	20	20
15 Gorge	91	91	91	91	91	91	91	91	91	91
16 Grand Coulee	1929	1938	1952	1961	1975	1975	1975	1975	1975	1976
17 Hells Canyon	189	189	189	189	189	189	189	189	189	189
18 Hungry Horse	77	77	77	77	78	78	78	78	78	78
19 Ice Harbor	138	138	137	137	136	136	136	136	136	136
20 John Day	802	797	800	801	805	805	805	805	805	805
21 La Grande	34	34	34	34	34	34	34	34	34	34
22 Libby	167	168	168	169	169	169	169	169	169	169
23 Little Falls	19	19	19	19	19	19	19	19	19	19
24 Little Goose	218	218	215	215	213	213	213	213	213	213
25 Long Lake	42	42	42	42	42	42	42	42	42	42
26 Lower Baker	35	35	35	35	35	35	35	35	35	35
27 Lower Granite	221	221	218	218	216	216	216	216	216	216
28 Lower Monumental	223	224	220	221	219	219	219	219	219	219
29 Mayfield	68	68	68	68	68	68	68	68	68	68
30 Mc Nary	518	518	521	527	530	541	553	564	576	587
31 Merwin	52	52	52	52	52	52	52	52	52	52
32 Monroe Street	11	11	11	11	11	11	11	11	11	11
33 Mossyrock	95	95	95	95	95	95	95	95	95	95
34 Nine Mile	13	13	13	13	13	13	13	13	13	13
35 North Fork	23	23	23	23	23	23	23	23	23	23
36 Noxon	131	131	131	131	131	131	131	131	131	131
37 Oak Grove	25	25	25	25	25	25	25	25	25	25
38 Oxbow	97	97	97	97	97	97	97	97	97	97
39 Pelton	36	36	36	36	36	36	36	36	36	36
40 Post Falls	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
41 Priest Rapids	337	337	337	337	337	337	337	337	337	337
42 River Mill	11	11	11	11	11	11	11	11	11	11
43 Rock Island PH#1	172	172	172	172	172	172	172	172	172	172
44 Rock Island PH#2	116	116	116	116	116	116	116	116	116	116
45 Rocky Reach	548	548	548	548	548	548	548	548	548	548
46 Ross	83	83	83	83	83	83	83	83	83	83
47 Round Butte	89	89	89	89	89	89	89	89	89	89
48 Swift 1	61	61	61	61	61	61	61	61	61	61
49 Swift 2	22	22	22	22	22	22	22	22	22	22
50 The Dalles	594	595	597	598	601	601	601	601	601	601
51 Upper Baker	34	34	34	34	34	34	34	34	34	34
52 Upper Falls	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
53 Wanapum	362	362	362	362	362	362	362	362	362	362
54 Wells	350	350	350	350	350	350	350	350	350	350
55 White	32	32	32	32	32	32	32	32	32	32
56 Yale	57	57	57	57	57	57	57	57	57	57
Total Regulated Hydro w/Enc.	10598	10605	10622	10650	10686	10703	10721	10736	10748	10762
-Total Regulated Hydro W/Enc.-										
57 Federal System	6439	6446	6464	6492	6527	6545	6562	6577	6589	6603
58 Public Entities	1670	1681	1782	1822	1822	1822	1974	2026	2026	2026
59 Investor-Owned Entities	2322	2311	2210	2170	2170	2170	2018	1966	1966	1966
60 Other Entities	167	167	167	167	167	167	167	167	167	167
61 Total Regulated Hydro w/Enc.	10598	10605	10622	10650	10686	10703	10721	10736	10748	10762

Table A-4
Independent Hydro Projects
Annual OY 2004 – 2013
Average Energy in Megawatts

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Table A-5
Imports
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

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Loads and Resources Information System

**Table A-5: Regional Imports
PNW Loads and Resource Study
2004 - 2013 Operating Years
2002 White Book**

<i>Average Energy in Megawatts</i>	2004 Avg.	2005 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	2013 Avg.
-Imports From East of Continental Divide-										
1 BEPC To NWE PwrS	42	42	42	42	42	42	42	0	0	0
2 PPL To BPA PwrS	94	94	94	94	94	94	94	94	94	94
3 Total Imports From ECD	136	136	136	136	136	136	136	94	94	94
-Imports From Pacific Southwest-										
4 ANHM To BPA PwrX	10	10	0	0	0	0	0	0	0	0
5 BURB To BPA XchgNrg	3.6	3.6	3.6	3.6	2.9	0	0	0	0	0
6 BURB To BPA PkRepl	3.8	3.8	3.8	3.8	2.5	0	0	0	0	0
7 CLTN To BPA PwrX	1	0	0	0	0	0	0	0	0	0
8 GLEN To BPA XchgNrg	4	4	4	4	3.2	0	0	0	0	0
9 GLEN To BPA PkRepl	4.2	4.2	4.2	4.2	2.7	0	0	0	0	0
10 GLEN To PGE S/Pwr/X	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0
11 NCPA To SCL S/Pwr/X	12	12	12	12	12	12	12	12	12	12
12 Other Entities To BPA	10	0	0	0	0	0	0	0	0	0
13 PASA To BPA XchgNrg	2.4	2.4	2.4	2.4	1.9	0	0	0	0	0
14 PASA To BPA PkRepl	2.5	2.5	2.5	2.5	1.6	0	0	0	0	0
15 PASA To BPA XchgNrg	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
16 PASA To BPA S/N/X	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
17 PASA To BPA PkRepl	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
18 PG&E To PSE S/Pwr/X	47	47	47	27	0	0	0	0	0	0
19 RVSD To BPA XchgNrg	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0	0	0
20 RVSD To BPA PkRepl	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0	0	0
21 RVSD To BPA PkRepl	2.8	2.8	2.8	2.8	2.8	2.8	1.7	0	0	0
22 RVSD To BPA XchgNrg	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
23 RVSD To BPA S/Pwr/X	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
24 RVSD To BPA PkRepl	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
25 SCE To PPL PwrS	18	0	0	0	0	0	0	0	0	0
26 Total Imports From PSW	151	122	112	92	59	44	43	35	35	32
-Imports From Inland Southwest-										
27 Other Entities To BPA	42	42	42	21	0	0	0	0	0	0
28 SPP To BPA PwrS	60	60	60	60	60	60	60	60	60	60
29 UPLC To UPLC PwrS	370	373	373	376	381	383	386	387	389	389
30 WAPA To GLEC ARP	3.3	3.3	3.3	0.5	0	0	0	0	0	0
31 Total Imports From ISW	475	478	478	457	441	443	446	447	449	449
-Imports From Canada-										
32 BCHP To SCL PwrS	36	36	36	36	36	36	36	36	36	36
33 Other Entities To PGE	42	0	0	0	0	0	0	0	0	0
34 PWRX To BPA PkRepl	0.4	0	0	0	0	0	0	0	0	0
35 PWRX To BPA PkRepl	0.1	0	0	0	0	0	0	0	0	0
36 PWRX To BPA PkRepl	0.4	0	0	0	0	0	0	0	0	0
37 PWRX To EWEB PwrS	2.8	0	0	0	0	0	0	0	0	0
38 PWRX To VID ARP	0	0	0	0	0	0	0	0	0	0
39 Total Imports From Canada	81	36	36	36	36	36	36	36	36	36
-Imports From Other Entities-										
40 Total Imports From Other Entities	0	0	0	0	0	0	0	0	0	0
-Total Imports-										
41 Federal System	268	255	245	225	198	183	182	174	174	174
42 Public Entities	54	51	51	49	48	48	48	48	48	48
43 Investor-Owned Entities	521	465	466	448	426	428	431	390	392	389
44 Other Entities	0	0	0	0	0	0	0	0	0	0
45 Total Imports.	843	772	762	721	672	659	661	612	614	611

Table A-6
Small Thermal & Miscellaneous
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

Table A-7
Combustion Turbines
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

Table A-8
Renewable Resources
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

Table A-9
Cogeneration
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

Table A-10
Large Thermal
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

**Table A-10: Regional Large Thermal
PNW Loads and Resource Study
2004 - 2013 Operating Years
2002 White Book**

Average Energy in Megawatts	2004 Avg.	2005 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	2013 Avg.
-Total Large Thermal-										
46 Federal System	1000	877	1000	877	1000	877	1000	877	1000	877
47 Public Entities	48	48	48	48	48	48	48	48	48	48
48 Investor-Owned Entities	5017	5019	5043	5043	5042	5042	5025	5019	5041	5042
49 Other Entities	0	0	0	0	0	0	0	0	0	0
50 Non-NW Entities	0	0	0	0	0	0	0	0	0	0
51 Total Large Thermal	6065	5944	6091	5968	6091	5967	6073	5944	6090	5967

Table A-11
Restoration
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

Table A-12
Canadian Entitlement Return For CSPE
Annual OY 2004 – 2013
Average Energy in Megawatts

Power Business Line

Reports Powered by:



Loads and Resources Information System

