

## **Section 7: Regional System Exhibits**

---

THIS PAGE INTENTIONALLY LEFT BLANK

---

---

***Exhibit 18***

***Regional Annual Energy Analysis Under 1937 Water Conditions for 10 Operating  
Years***

---

THIS PAGE INTENTIONALLY LEFT BLANK

## Exhibit 18: Medium Loads

*Loads and Resources - Pacific Northwest Region  
2002 - 2011 Operating Years  
1937 Water Year*

10/1/2001

<u>Average Energy in Megawatts</u>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Firm Regional Loads</b>										
Regional Firm Loads	22367	22509	22945	23390	23750	24121	24465	24889	25282	25679
Exports	1908	1888	1827	1637	1411	1131	1010	994	993	994
Federal Diversity	0	0	0	0	0	0	0	0	0	0
<b>Total Firm Regional Loads</b>	<b>24275</b>	<b>24397</b>	<b>24772</b>	<b>25028</b>	<b>25161</b>	<b>25252</b>	<b>25475</b>	<b>25883</b>	<b>26275</b>	<b>26673</b>
<b>Non-Firm Regional Loads</b>										
Regional Non-Firm Loads	14	14	14	14	14	14	14	14	14	14
<b>Total Non-Firm Regional Loads</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Total Loads</b>	<b>24289</b>	<b>24411</b>	<b>24786</b>	<b>25042</b>	<b>25175</b>	<b>25266</b>	<b>25489</b>	<b>25897</b>	<b>26289</b>	<b>26687</b>
<b>Hydro Resources</b>										
Regulated Hydro	10502	10509	10518	10524	10532	10542	10548	10551	10553	10557
Independent Hydro	1121	1121	1122	1121	1121	1122	1122	1122	1123	1128
Sustained Peaking Adjustment	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>11623</b>	<b>11630</b>	<b>11640</b>	<b>11645</b>	<b>11652</b>	<b>11664</b>	<b>11669</b>	<b>11673</b>	<b>11676</b>	<b>11685</b>
<b>Other Resources</b>										
Small Thermal & Misc.	51	50	51	50	50	51	51	52	52	58
Combustion Turbines	655	656	651	659	658	656	658	656	651	659
Renewables	76	76	76	76	76	76	76	76	76	76
Cogeneration	676	676	676	676	676	676	676	676	676	676
Imports	1749	1678	1581	1435	1428	1411	1282	1261	1203	821
Large Thermal	5034	4850	4952	4880	4962	4843	5016	4836	4954	4895
Non-Utility Generation	1234	1223	1224	1264	1269	1268	1268	1268	1269	1271
Resource Acquisition	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>9475</b>	<b>9209</b>	<b>9211</b>	<b>9041</b>	<b>9120</b>	<b>8982</b>	<b>9027</b>	<b>8825</b>	<b>8881</b>	<b>8457</b>
<b>Total Resources</b>	<b>21097</b>	<b>20839</b>	<b>20851</b>	<b>20686</b>	<b>20772</b>	<b>20647</b>	<b>20696</b>	<b>20497</b>	<b>20557</b>	<b>20142</b>
<b>Reserves &amp; Maintenance</b>										
Hydro Reserves	0	0	0	0	0	0	0	0	0	0
Small Thermal & Misc. Reserves	0	0	0	0	0	0	0	0	0	0
Contract Reserves	0	0	0	0	0	0	0	0	0	0
Large Thermal Reserves	0	0	0	0	0	0	0	0	0	0
Regional Hydro Maintenance	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12
Spinning Reserves	0	0	0	0	0	0	0	0	0	0
Regional Transmission Losses	-595	-587	-588	-583	-585	-582	-583	-578	-579	-568
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-607</b>	<b>-600</b>	<b>-600</b>	<b>-595</b>	<b>-598</b>	<b>-594</b>	<b>-596</b>	<b>-590</b>	<b>-592</b>	<b>-580</b>
<b>Total Net Resources</b>	<b>20491</b>	<b>20240</b>	<b>20251</b>	<b>20091</b>	<b>20174</b>	<b>20052</b>	<b>20101</b>	<b>19907</b>	<b>19966</b>	<b>19563</b>
<b>Surplus/Deficits</b>										
Firm Surplus/Deficit	-3784	-4157	-4521	-4937	-4987	-5199	-5374	-5976	-6310	-7110
<b>Total Surplus/Deficit</b>	<b>-3798</b>	<b>-4171</b>	<b>-4535</b>	<b>-4951</b>	<b>-5001</b>	<b>-5213</b>	<b>-5388</b>	<b>-5990</b>	<b>-6324</b>	<b>-7124</b>

THIS PAGE INTENTIONALLY LEFT BLANK

---

---

***Exhibits 19 – 21***

***Regional Monthly Energy Analysis Under Medium Loads for 1937 Water  
Conditions***

---

THIS PAGE INTENTIONALLY LEFT BLANK



## Exhibit 19: OY 2001-02

*Loads and Resources - Pacific Northwest Region  
2001 - 2002 Operating Year  
1937 Water Year*

10/1/2001

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg
<b>Firm Regional Loads</b>															
Regional Firm Loads	22522	22522	21530	20722	22648	24495	25035	24204	22329	21444	21424	20767	21211	21505	22367
Exports	2300	2300	2069	1765	1700	1726	1765	1725	1687	1817	1817	1821	2255	2265	1908
Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Firm Regional Loads</b>	<b>24822</b>	<b>24822</b>	<b>23599</b>	<b>22487</b>	<b>24348</b>	<b>26221</b>	<b>26800</b>	<b>25929</b>	<b>24016</b>	<b>23261</b>	<b>23240</b>	<b>22588</b>	<b>23466</b>	<b>23770</b>	<b>24275</b>
<b>Non-Firm Regional Loads</b>															
Regional Non-Firm Loads	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
<b>Total Non-Firm Regional Loads</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Total Loads</b>	<b>24836</b>	<b>24836</b>	<b>23613</b>	<b>22501</b>	<b>24362</b>	<b>26235</b>	<b>26814</b>	<b>25943</b>	<b>24030</b>	<b>23275</b>	<b>23254</b>	<b>22602</b>	<b>23480</b>	<b>23784</b>	<b>24289</b>
<b>Hydro Resources</b>															
Regulated Hydro	11234	10205	9234	10180	10184	11902	9462	10492	8550	9243	9208	12591	11704	11781	10502
Independent Hydro	1103	1131	1052	1024	934	998	812	825	975	1241	1294	1593	1643	1209	1121
Sustained Peaking Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>12337</b>	<b>11336</b>	<b>10286</b>	<b>11204</b>	<b>11118</b>	<b>12900</b>	<b>10275</b>	<b>11317</b>	<b>9524</b>	<b>10484</b>	<b>10502</b>	<b>14184</b>	<b>13348</b>	<b>12990</b>	<b>11623</b>
<b>Other Resources</b>															
Small Thermal & Misc.	71	72	58	59	49	46	47	45	47	46	45	57	17	66	51
Combustion Turbines	660	683	688	717	731	734	735	735	489	264	551	584	691	675	655
Renewables	78	78	78	79	80	82	83	82	82	81	81	33	78	78	76
Cogeneration	718	718	718	718	718	731	718	718	718	718	718	275	651	711	676
Imports	1780	1779	1383	1550	1887	2191	2245	2005	1626	1534	1493	1347	1651	1806	1749
Large Thermal	5213	5217	5165	5167	5129	5119	5122	5114	4995	4886	4979	4087	5161	5201	5034
Non-Utility Generation	1296	1333	1243	1223	1266	1285	1204	1211	1127	1278	1278	1001	1305	1350	1234
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>9817</b>	<b>9881</b>	<b>9332</b>	<b>9513</b>	<b>9860</b>	<b>10188</b>	<b>10154</b>	<b>9911</b>	<b>9084</b>	<b>8807</b>	<b>9146</b>	<b>7385</b>	<b>9555</b>	<b>9887</b>	<b>9475</b>
<b>Total Resources</b>	<b>22153</b>	<b>21216</b>	<b>19618</b>	<b>20717</b>	<b>20977</b>	<b>23088</b>	<b>20429</b>	<b>21228</b>	<b>18608</b>	<b>19291</b>	<b>19648</b>	<b>21569</b>	<b>22903</b>	<b>22877</b>	<b>21097</b>
<b>Reserves &amp; Maintenance</b>															
Hydro Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Thermal & Misc. Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Thermal Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regional Hydro Maintenance	-31	-26	-8.6	-9	-3.8	0	0	0	-5.2	-7.4	-7.6	-20	-15	-50	-12
Spinning Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regional Transmission Losses	-624	-598	-553	-584	-591	-651	-576	-599	-525	-544	-554	-608	-645	-644	-595
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-655</b>	<b>-623</b>	<b>-562</b>	<b>-593</b>	<b>-595</b>	<b>-651</b>	<b>-576</b>	<b>-599</b>	<b>-530</b>	<b>-551</b>	<b>-561</b>	<b>-628</b>	<b>-660</b>	<b>-694</b>	<b>-607</b>
<b>Total Net Resources</b>	<b>21498</b>	<b>20593</b>	<b>19057</b>	<b>20124</b>	<b>20382</b>	<b>22437</b>	<b>19853</b>	<b>20629</b>	<b>18078</b>	<b>18740</b>	<b>19087</b>	<b>20942</b>	<b>22242</b>	<b>22184</b>	<b>20491</b>
<b>Surplus/Deficits</b>															
Firm Surplus/Deficit	-3323	-4229	-4542	-2363	-3966	-3783	-6947	-5299	-5937	-4521	-4153	-1646	-1224	-1586	-3784
<b>Total Surplus/Deficit</b>	<b>-3337</b>	<b>-4243</b>	<b>-4556</b>	<b>-2377</b>	<b>-3980</b>	<b>-3797</b>	<b>-6961</b>	<b>-5313</b>	<b>-5951</b>	<b>-4535</b>	<b>-4167</b>	<b>-1660</b>	<b>-1238</b>	<b>-1600</b>	<b>-3798</b>

## Exhibit 20: OY 2005-06

*Loads and Resources - Pacific Northwest Region  
2005 - 2006 Operating Year  
1937 Water Year*

10/1/2001

<u>Average Energy in Megawatts</u>	<u>Aug1</u>	<u>Aug16</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr1</u>	<u>Apr16</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Avg</u>
<b><u>Firm Regional Loads</u></b>															
Regional Firm Loads	22306	22304	21385	22195	24377	26435	27077	26107	24128	23172	23147	22194	22636	23000	23750
Exports	1598	1598	1517	1321	1313	1316	1316	1295	1284	1392	1392	1414	1614	1556	1411
Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Firm Regional Loads</b>	<b>23904</b>	<b>23902</b>	<b>22902</b>	<b>23517</b>	<b>25689</b>	<b>27752</b>	<b>28394</b>	<b>27402</b>	<b>25412</b>	<b>24564</b>	<b>24539</b>	<b>23607</b>	<b>24250</b>	<b>24556</b>	<b>25161</b>
<b><u>Non-Firm Regional Loads</u></b>															
Regional Non-Firm Loads	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
<b>Total Non-Firm Regional Loads</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Total Loads</b>	<b>23918</b>	<b>23916</b>	<b>22916</b>	<b>23531</b>	<b>25703</b>	<b>27766</b>	<b>28408</b>	<b>27416</b>	<b>25426</b>	<b>24578</b>	<b>24553</b>	<b>23621</b>	<b>24264</b>	<b>24570</b>	<b>25175</b>
<b><u>Hydro Resources</u></b>															
Regulated Hydro	11266	10227	9261	10207	10217	11946	9507	10520	8572	9278	9241	12626	11732	11787	10532
Independent Hydro	1092	1120	1051	1024	933	1004	819	832	974	1240	1294	1593	1643	1200	1121
Sustained Peaking Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>12357</b>	<b>11346</b>	<b>10312</b>	<b>11231</b>	<b>11150</b>	<b>12950</b>	<b>10326</b>	<b>11352</b>	<b>9546</b>	<b>10518</b>	<b>10535</b>	<b>14219</b>	<b>13376</b>	<b>12987</b>	<b>11652</b>
<b><u>Other Resources</u></b>															
Small Thermal & Misc.	60	61	58	58	48	52	53	51	46	46	45	57	17	56	50
Combustion Turbines	677	700	705	717	731	734	735	735	489	264	551	584	691	675	658
Renewables	78	78	78	79	80	82	83	82	82	81	81	33	78	78	76
Cogeneration	718	718	718	718	718	731	718	718	718	718	718	275	651	711	676
Imports	1508	1508	1279	1186	1615	1675	1720	1667	1299	1249	1208	937	1416	1604	1428
Large Thermal	5173	5177	5164	5166	5128	5142	5145	5138	5013	4959	4954	4016	4345	5157	4962
Non-Utility Generation	1379	1415	1294	1214	1255	1280	1252	1258	1171	1323	1323	1046	1351	1389	1269
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>9594</b>	<b>9657</b>	<b>9296</b>	<b>9139</b>	<b>9576</b>	<b>9698</b>	<b>9707</b>	<b>9650</b>	<b>8818</b>	<b>8640</b>	<b>8880</b>	<b>6949</b>	<b>8549</b>	<b>9670</b>	<b>9120</b>
<b>Total Resources</b>	<b>21951</b>	<b>21003</b>	<b>19608</b>	<b>20370</b>	<b>20726</b>	<b>22648</b>	<b>20033</b>	<b>21002</b>	<b>18365</b>	<b>19158</b>	<b>19415</b>	<b>21168</b>	<b>21925</b>	<b>22657</b>	<b>20772</b>
<b><u>Reserves &amp; Maintenance</u></b>															
Hydro Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Thermal & Misc. Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Thermal Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regional Hydro Maintenance	-31	-25	-8.6	-9	-3.8	0	0	0	-5.2	-7.4	-7.6	-20	-15	-50	-12
Spinning Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regional Transmission Losses	-618	-592	-553	-574	-584	-639	-565	-592	-518	-540	-547	-596	-618	-638	-585
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-649</b>	<b>-617</b>	<b>-561</b>	<b>-583</b>	<b>-588</b>	<b>-639</b>	<b>-565</b>	<b>-592</b>	<b>-523</b>	<b>-547</b>	<b>-555</b>	<b>-616</b>	<b>-633</b>	<b>-687</b>	<b>-598</b>
<b>Total Net Resources</b>	<b>21302</b>	<b>20386</b>	<b>19047</b>	<b>19787</b>	<b>20138</b>	<b>22009</b>	<b>19468</b>	<b>20410</b>	<b>17842</b>	<b>18611</b>	<b>18860</b>	<b>20551</b>	<b>21292</b>	<b>21970</b>	<b>20174</b>
<b><u>Surplus/Deficits</u></b>															
Firm Surplus/Deficit	-2602	-3516	-3855	-3730	-5551	-5743	-8926	-6992	-7570	-5954	-5680	-3056	-2958	-2586	-4987
<b>Total Surplus/Deficit</b>	<b>-2616</b>	<b>-3530</b>	<b>-3869</b>	<b>-3744</b>	<b>-5565</b>	<b>-5757</b>	<b>-8940</b>	<b>-7006</b>	<b>-7584</b>	<b>-5968</b>	<b>-5694</b>	<b>-3070</b>	<b>-2972</b>	<b>-2600</b>	<b>-5001</b>

## Exhibit 21: OY 2010-11

*Loads and Resources - Pacific Northwest Region  
2010 - 2011 Operating Year  
1937 Water Year*

10/1/2001

<u>Average Energy in Megawatts</u>	<u>Aug1</u>	<u>Aug16</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr1</u>	<u>Apr16</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Avg</u>
<b><u>Firm Regional Loads</u></b>															
Regional Firm Loads	24085	24083	23102	24008	26392	28651	29318	28294	26093	25030	25006	23955	24426	24808	25679
Exports	1104	1104	1042	950	936	944	939	924	907	941	941	940	1134	1165	994
Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Firm Regional Loads</b>	<b>25189</b>	<b>25187</b>	<b>24144</b>	<b>24958</b>	<b>27328</b>	<b>29594</b>	<b>30257</b>	<b>29218</b>	<b>27000</b>	<b>25971</b>	<b>25947</b>	<b>24895</b>	<b>25560</b>	<b>25973</b>	<b>26673</b>
<b><u>Non-Firm Regional Loads</u></b>															
Regional Non-Firm Loads	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
<b>Total Non-Firm Regional Loads</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Total Loads</b>	<b>25203</b>	<b>25201</b>	<b>24158</b>	<b>24972</b>	<b>27342</b>	<b>29608</b>	<b>30271</b>	<b>29232</b>	<b>27014</b>	<b>25985</b>	<b>25961</b>	<b>24909</b>	<b>25574</b>	<b>25987</b>	<b>26687</b>
<b><u>Hydro Resources</u></b>															
Regulated Hydro	11290	10244	9276	10224	10250	11980	9543	10543	8597	9306	9271	12661	11751	11802	10557
Independent Hydro	1093	1121	1052	1025	946	1017	832	845	987	1254	1307	1602	1644	1201	1128
Sustained Peaking Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>12383</b>	<b>11365</b>	<b>10328</b>	<b>11249</b>	<b>11196</b>	<b>12997</b>	<b>10375</b>	<b>11388</b>	<b>9584</b>	<b>10560</b>	<b>10578</b>	<b>14263</b>	<b>13396</b>	<b>13003</b>	<b>11685</b>
<b><u>Other Resources</u></b>															
Small Thermal & Misc.	61	62	59	59	60	64	65	64	59	59	58	66	17	57	58
Combustion Turbines	679	702	707	719	733	736	737	736	491	266	553	585	693	677	659
Renewables	78	78	78	79	80	82	83	82	82	81	81	33	78	78	76
Cogeneration	718	718	718	718	718	731	718	718	718	718	718	275	651	711	676
Imports	796	796	533	638	909	982	961	967	913	748	723	753	796	864	821
Large Thermal	5177	5181	5167	5170	5172	5187	5191	5186	5004	4467	4206	3826	4165	5161	4895
Non-Utility Generation	1374	1409	1288	1208	1258	1281	1259	1268	1180	1330	1330	1052	1352	1389	1271
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>8884</b>	<b>8947</b>	<b>8551</b>	<b>8592</b>	<b>8932</b>	<b>9064</b>	<b>9016</b>	<b>9022</b>	<b>8448</b>	<b>7670</b>	<b>7668</b>	<b>6589</b>	<b>7752</b>	<b>8938</b>	<b>8457</b>
<b>Total Resources</b>	<b>21267</b>	<b>20312</b>	<b>18879</b>	<b>19840</b>	<b>20128</b>	<b>22061</b>	<b>19391</b>	<b>20411</b>	<b>18032</b>	<b>18229</b>	<b>18246</b>	<b>20852</b>	<b>21148</b>	<b>21941</b>	<b>20142</b>
<b><u>Reserves &amp; Maintenance</u></b>															
Hydro Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Thermal & Misc. Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Thermal Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regional Hydro Maintenance	-31	-25	-8.6	-9	-3.8	0	0	0	-5.2	-7.4	-7.6	-20	-15	-50	-12
Spinning Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regional Transmission Losses	-599	-572	-532	-559	-568	-622	-547	-576	-508	-514	-514	-587	-596	-617	-568
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-630</b>	<b>-597</b>	<b>-541</b>	<b>-568</b>	<b>-571</b>	<b>-622</b>	<b>-547</b>	<b>-576</b>	<b>-514</b>	<b>-521</b>	<b>-522</b>	<b>-607</b>	<b>-611</b>	<b>-667</b>	<b>-580</b>
<b>Total Net Resources</b>	<b>20637</b>	<b>19714</b>	<b>18338</b>	<b>19272</b>	<b>19557</b>	<b>21439</b>	<b>18844</b>	<b>19835</b>	<b>17518</b>	<b>17708</b>	<b>17724</b>	<b>20245</b>	<b>20537</b>	<b>21274</b>	<b>19563</b>
<b><u>Surplus/Deficits</u></b>															
Firm Surplus/Deficit	-4551	-5472	-5806	-5686	-7771	-8155	-11413	-9383	-9482	-8263	-8223	-4650	-5023	-4700	-7110
<b>Total Surplus/Deficit</b>	<b>-4565</b>	<b>-5486</b>	<b>-5820</b>	<b>-5700</b>	<b>-7785</b>	<b>-8169</b>	<b>-11427</b>	<b>-9397</b>	<b>-9496</b>	<b>-8277</b>	<b>-8237</b>	<b>-4664</b>	<b>-5037</b>	<b>-4714</b>	<b>-7124</b>

THIS PAGE INTENTIONALLY LEFT BLANK

---

---

***Exhibits 22 – 24***

***Regional Monthly Capacity Analysis Under Medium Loads for 1937 Water  
Conditions***

---

THIS PAGE INTENTIONALLY LEFT BLANK

## Exhibit 22: OY 2001-02

*Loads and Resources - Pacific Northwest Region  
2001 - 2002 Operating Year  
1937 Water Year*

10/1/2001

<u>Capacity in Megawatts</u>	<u>Aug1</u>	<u>Aug16</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr1</u>	<u>Apr16</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>
<b>Firm Regional Loads</b>														
Regional Firm Loads	29025	29025	27968	28504	31264	33846	34621	33483	30779	29383	29383	27942	27209	27845
Exports	3478	3478	3253	2794	2693	2712	2747	2697	2675	2809	2809	2920	3423	3445
Federal Diversity	-682	-675	-692	-732	-660	-519	-538	-526	-703	-659	-659	-755	-717	-736
<b>Total Firm Regional Loads</b>	<b>31821</b>	<b>31827</b>	<b>30530</b>	<b>30566</b>	<b>33297</b>	<b>36039</b>	<b>36830</b>	<b>35654</b>	<b>32750</b>	<b>31532</b>	<b>31532</b>	<b>30107</b>	<b>29916</b>	<b>30554</b>
<b>Non-Firm Regional Loads</b>														
Regional Non-Firm Loads	150	150	143	117	170	101	195	140	193	160	160	130	186	159
<b>Total Non-Firm Regional Loads</b>	<b>150</b>	<b>150</b>	<b>143</b>	<b>117</b>	<b>170</b>	<b>101</b>	<b>195</b>	<b>140</b>	<b>193</b>	<b>160</b>	<b>160</b>	<b>130</b>	<b>186</b>	<b>159</b>
<b>Total Loads</b>	<b>31970</b>	<b>31977</b>	<b>30672</b>	<b>30684</b>	<b>33467</b>	<b>36140</b>	<b>37025</b>	<b>35793</b>	<b>32943</b>	<b>31693</b>	<b>31692</b>	<b>30237</b>	<b>30101</b>	<b>30713</b>
<b>Hydro Resources</b>														
Regulated Hydro	26986	26953	26391	26721	27017	28342	28216	28119	27490	27631	27597	27185	28269	26981
Independent Hydro	1960	1942	1918	1890	1843	1828	1780	1883	1980	2023	2048	2151	2163	2024
Sustained Peaking Adjustment	-100	-1388	-2284	-1238	-2278	-1439	-5404	-3768	-4440	-4152	-5497	-1310	-4029	-700
<b>Total Hydro Resources</b>	<b>28846</b>	<b>27507</b>	<b>26025</b>	<b>27374</b>	<b>26583</b>	<b>28731</b>	<b>24592</b>	<b>26233</b>	<b>25030</b>	<b>25502</b>	<b>24148</b>	<b>28026</b>	<b>26402</b>	<b>28306</b>
<b>Other Resources</b>														
Small Thermal & Misc.	53	53	45	47	43	40	41	38	36	32	32	48	1	55
Combustion Turbines	1054	1054	1055	1080	1538	1540	1538	1537	1082	580	1080	834	1076	1070
Renewables	81	81	81	82	83	85	87	86	86	85	85	34	82	82
Cogeneration	775	775	775	775	775	755	775	775	775	775	775	306	775	755
Imports	2102	2102	1560	2362	2445	2991	3038	2855	2315	1698	1698	1597	2116	2050
Large Thermal	5745	5745	5716	5724	5699	5689	5691	5681	5562	5495	5495	4132	5734	5751
Non-Utility Generation	1481	1481	1389	1290	1237	1219	1142	1169	1204	1356	1356	769	1345	1473
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>11293</b>	<b>11293</b>	<b>10620</b>	<b>11361</b>	<b>11819</b>	<b>12319</b>	<b>12313</b>	<b>12140</b>	<b>11059</b>	<b>10020</b>	<b>10520</b>	<b>7720</b>	<b>11128</b>	<b>11236</b>
<b>Total Resources</b>	<b>40139</b>	<b>38799</b>	<b>36645</b>	<b>38735</b>	<b>38402</b>	<b>41050</b>	<b>36905</b>	<b>38374</b>	<b>36089</b>	<b>35523</b>	<b>34669</b>	<b>35746</b>	<b>37530</b>	<b>39542</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-1447	-1445	-1415	-1431	-1443	-1508	-1500	-1500	-1473	-1483	-1482	-1467	-1522	-1450
Small Thermal & Misc. Reserves	-172	-172	-167	-164	-184	-182	-179	-180	-159	-141	-166	-100	-164	-172
Contract Reserves	-1459	-1459	-959	-1108	-1111	-1258	-1278	-1337	-1188	-1020	-1020	-1578	-1662	-1409
Large Thermal Reserves	-862	-862	-857	-859	-855	-853	-854	-852	-834	-824	-824	-620	-860	-863
Regional Hydro Maintenance	-4607	-4044	-3787	-3208	-2935	-2037	-1561	-2288	-2631	-2751	-2483	-2360	-2202	-3721
Spinning Reserves	-820	-801	-755	-807	-794	-879	-791	-814	-757	-765	-739	-790	-818	-827
Regional Transmission Losses	-1031	-1006	-962	-1044	-1041	-1150	-1030	-1052	-973	-956	-936	-966	-1015	-1042
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-10398</b>	<b>-9789</b>	<b>-8902</b>	<b>-8620</b>	<b>-8363</b>	<b>-7868</b>	<b>-7193</b>	<b>-8023</b>	<b>-8016</b>	<b>-7941</b>	<b>-7652</b>	<b>-7880</b>	<b>-8243</b>	<b>-9484</b>
<b>Total Net Resources</b>	<b>29741</b>	<b>29010</b>	<b>27743</b>	<b>30115</b>	<b>30039</b>	<b>33182</b>	<b>29712</b>	<b>30350</b>	<b>28073</b>	<b>27582</b>	<b>27017</b>	<b>27866</b>	<b>29287</b>	<b>30059</b>
<b>Surplus/Deficits</b>														
Firm Surplus/Deficit	-2079	-2817	-2787	-451	-3259	-2857	-7118	-5303	-4677	-3951	-4515	-2240	-628	-495
<b>Total Surplus/Deficit</b>	<b>-2229</b>	<b>-2967</b>	<b>-2929</b>	<b>-569</b>	<b>-3428</b>	<b>-2958</b>	<b>-7313</b>	<b>-5443</b>	<b>-4870</b>	<b>-4111</b>	<b>-4675</b>	<b>-2370</b>	<b>-814</b>	<b>-655</b>

## Exhibit 23: OY 2005-06

*Loads and Resources - Pacific Northwest Region  
2005 - 2006 Operating Year  
1937 Water Year*

10/1/2001

<u>Capacity in Megawatts</u>	<u>Aug1</u>	<u>Aug16</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr1</u>	<u>Apr16</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>
<b><u>Firm Regional Loads</u></b>														
Regional Firm Loads	29287	29284	28308	30564	33320	36301	37242	35952	33186	31545	31545	30002	29183	29764
Exports	2685	2685	2591	2322	2232	2264	2272	2248	2230	2337	2337	2459	2613	2575
Federal Diversity	-818	-817	-825	-836	-746	-580	-600	-586	-784	-743	-743	-864	-843	-850
<b>Total Firm Regional Loads</b>	<b>31154</b>	<b>31152</b>	<b>30073</b>	<b>32050</b>	<b>34805</b>	<b>37985</b>	<b>38914</b>	<b>37614</b>	<b>34632</b>	<b>33139</b>	<b>33139</b>	<b>31597</b>	<b>30953</b>	<b>31488</b>
<b><u>Non-Firm Regional Loads</u></b>														
Regional Non-Firm Loads	148	148	144	144	169	85	151	154	188	160	160	130	176	162
<b>Total Non-Firm Regional Loads</b>	<b>148</b>	<b>148</b>	<b>144</b>	<b>144</b>	<b>169</b>	<b>85</b>	<b>151</b>	<b>154</b>	<b>188</b>	<b>160</b>	<b>160</b>	<b>130</b>	<b>176</b>	<b>162</b>
<b>Total Loads</b>	<b>31302</b>	<b>31300</b>	<b>30217</b>	<b>32194</b>	<b>34974</b>	<b>38070</b>	<b>39065</b>	<b>37768</b>	<b>34820</b>	<b>33299</b>	<b>33299</b>	<b>31726</b>	<b>31129</b>	<b>31650</b>
<b><u>Hydro Resources</u></b>														
Regulated Hydro	26971	26937	26391	26721	27016	28352	28225	28128	27490	27632	27597	27185	28268	26966
Independent Hydro	1944	1926	1918	1890	1843	1838	1789	1892	1980	2023	2048	2151	2162	2008
Sustained Peaking Adjustment	-100	-1313	-2200	-1166	-2178	-1354	-5404	-3702	-4440	-4152	-5497	-1270	-3973	-700
<b>Total Hydro Resources</b>	<b>28815</b>	<b>27550</b>	<b>26109</b>	<b>27444</b>	<b>26681</b>	<b>28835</b>	<b>24611</b>	<b>26318</b>	<b>25030</b>	<b>25502</b>	<b>24148</b>	<b>28065</b>	<b>26458</b>	<b>28275</b>
<b><u>Other Resources</u></b>														
Small Thermal & Misc.	45	45	45	47	43	46	46	43	35	32	32	48	1	47
Combustion Turbines	1072	1072	1074	1080	1538	1540	1538	1537	1082	580	1080	834	1076	1070
Renewables	82	82	82	83	84	86	87	86	86	85	85	34	82	82
Cogeneration	775	775	775	775	775	755	775	775	775	775	775	308	775	755
Imports	1724	1724	1496	1395	1708	1982	2051	2046	1463	1398	1398	1312	1832	1774
Large Thermal	5715	5715	5715	5723	5697	5709	5710	5700	5682	5495	5495	4132	4994	5721
Non-Utility Generation	1469	1469	1383	1280	1227	1214	1188	1215	1246	1399	1399	812	1387	1509
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>10882</b>	<b>10882</b>	<b>10569</b>	<b>10384</b>	<b>11072</b>	<b>11331</b>	<b>11395</b>	<b>11402</b>	<b>10370</b>	<b>9764</b>	<b>10264</b>	<b>7478</b>	<b>10146</b>	<b>10958</b>
<b>Total Resources</b>	<b>39696</b>	<b>38432</b>	<b>36678</b>	<b>37828</b>	<b>37752</b>	<b>40167</b>	<b>36006</b>	<b>37721</b>	<b>35400</b>	<b>35266</b>	<b>34412</b>	<b>35543</b>	<b>36604</b>	<b>39233</b>
<b><u>Reserves &amp; Maintenance</u></b>														
Hydro Reserves	-1446	-1443	-1415	-1431	-1443	-1509	-1501	-1501	-1473	-1483	-1482	-1467	-1522	-1449
Small Thermal & Misc. Reserves	-172	-172	-168	-163	-183	-182	-182	-183	-161	-144	-169	-102	-166	-173
Contract Reserves	-1459	-1459	-969	-1108	-1111	-1258	-1278	-1337	-1188	-1020	-1020	-1578	-1662	-1409
Large Thermal Reserves	-857	-857	-857	-858	-855	-856	-857	-855	-852	-824	-824	-620	-749	-858
Regional Hydro Maintenance	-4605	-4042	-3787	-3208	-2935	-2037	-1561	-2288	-2631	-2751	-2483	-2360	-2202	-3721
Spinning Reserves	-814	-798	-763	-805	-800	-878	-790	-814	-755	-763	-737	-789	-795	-822
Regional Transmission Losses	-1016	-994	-962	-1014	-1019	-1120	-1000	-1030	-949	-947	-928	-959	-989	-1032
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-10370</b>	<b>-9765</b>	<b>-8912</b>	<b>-8587</b>	<b>-8346</b>	<b>-7842</b>	<b>-7168</b>	<b>-8008</b>	<b>-8010</b>	<b>-7932</b>	<b>-7643</b>	<b>-7874</b>	<b>-8085</b>	<b>-9464</b>
<b>Total Net Resources</b>	<b>29327</b>	<b>28667</b>	<b>27766</b>	<b>29241</b>	<b>29406</b>	<b>32324</b>	<b>28838</b>	<b>29712</b>	<b>27390</b>	<b>27334</b>	<b>26769</b>	<b>27669</b>	<b>28519</b>	<b>29769</b>
<b><u>Surplus/Deficits</u></b>														
Firm Surplus/Deficit	-1827	-2485	-2307	-2809	-5399	-5660	-10075	-7902	-7242	-5805	-6369	-3927	-2434	-1720
<b>Total Surplus/Deficit</b>	<b>-1976</b>	<b>-2633</b>	<b>-2451</b>	<b>-2953</b>	<b>-5569</b>	<b>-5745</b>	<b>-10226</b>	<b>-8056</b>	<b>-7430</b>	<b>-5965</b>	<b>-6530</b>	<b>-4057</b>	<b>-2610</b>	<b>-1881</b>



## Exhibit 24: OY 2010-11

### Loads and Resources - Pacific Northwest Region 2010 - 2011 Operating Year 1937 Water Year

10/1/2001

Capacity in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul
<b>Firm Regional Loads</b>														
Regional Firm Loads	31691	31688	30603	33047	35916	39148	40259	39016	36077	34401	34400	32630	31682	32225
Exports	2014	2014	1918	1816	1771	1805	1813	1791	1766	1768	1768	1845	1999	2056
Federal Diversity	-879	-878	-895	-915	-828	-645	-663	-647	-860	-804	-804	-912	-881	-893
<b>Total Firm Regional Loads</b>	<b>32826</b>	<b>32824</b>	<b>31625</b>	<b>33948</b>	<b>36859</b>	<b>40308</b>	<b>41409</b>	<b>40161</b>	<b>36984</b>	<b>35365</b>	<b>35364</b>	<b>33564</b>	<b>32800</b>	<b>33388</b>
<b>Non-Firm Regional Loads</b>														
Regional Non-Firm Loads	162	162	143	112	170	88	191	141	188	161	161	134	174	159
<b>Total Non-Firm Regional Loads</b>	<b>162</b>	<b>162</b>	<b>143</b>	<b>112</b>	<b>170</b>	<b>88</b>	<b>191</b>	<b>141</b>	<b>188</b>	<b>161</b>	<b>161</b>	<b>134</b>	<b>174</b>	<b>159</b>
<b>Total Loads</b>	<b>32988</b>	<b>32986</b>	<b>31768</b>	<b>34060</b>	<b>37029</b>	<b>40396</b>	<b>41600</b>	<b>40301</b>	<b>37172</b>	<b>35526</b>	<b>35526</b>	<b>33697</b>	<b>32974</b>	<b>33547</b>
<b>Hydro Resources</b>														
Regulated Hydro	26974	26940	26393	26723	27038	28374	28248	28151	27512	27653	27619	27201	28272	26970
Independent Hydro	1946	1929	1921	1892	1864	1861	1813	1914	2003	2047	2071	2167	2166	2012
Sustained Peaking Adjustment	-100	-1268	-2153	-1125	-2122	-1306	-5404	-3665	-4440	-4152	-5497	-1247	-3941	-700
<b>Total Hydro Resources</b>	<b>28820</b>	<b>27600</b>	<b>26161</b>	<b>27489</b>	<b>26781</b>	<b>28928</b>	<b>24657</b>	<b>26400</b>	<b>25075</b>	<b>25547</b>	<b>24193</b>	<b>28121</b>	<b>26497</b>	<b>28281</b>
<b>Other Resources</b>														
Small Thermal & Misc.	46	46	46	48	55	59	59	57	49	46	46	57	1	48
Combustion Turbines	1074	1074	1076	1082	1540	1542	1540	1539	1084	582	1082	834	1078	1072
Renewables	82	82	82	83	84	86	87	86	86	85	85	34	82	82
Cogeneration	775	775	775	775	775	755	775	775	775	775	775	306	775	755
Imports	1109	1109	776	972	1254	1196	1213	1242	1274	905	905	1284	1253	1089
Large Thermal	5720	5720	5720	5727	5743	5755	5756	5748	5729	5048	4694	4792	4579	5728
Non-Utility Generation	1462	1462	1376	1273	1228	1215	1197	1224	1255	1407	1407	818	1388	1510
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>10269</b>	<b>10269</b>	<b>9850</b>	<b>9961</b>	<b>10679</b>	<b>10607</b>	<b>10628</b>	<b>10670</b>	<b>10252</b>	<b>8847</b>	<b>8993</b>	<b>8124</b>	<b>9155</b>	<b>10284</b>
<b>Total Resources</b>	<b>39089</b>	<b>37869</b>	<b>36012</b>	<b>37450</b>	<b>37460</b>	<b>39535</b>	<b>35285</b>	<b>37070</b>	<b>35326</b>	<b>34394</b>	<b>33187</b>	<b>36245</b>	<b>35652</b>	<b>38566</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-1446	-1443	-1416	-1431	-1445	-1512	-1503	-1503	-1476	-1485	-1484	-1468	-1522	-1449
Small Thermal & Misc. Reserves	-172	-172	-168	-163	-184	-183	-183	-184	-162	-145	-170	-102	-166	-173
Contract Reserves	-1459	-1459	-959	-1108	-1111	-1258	-1278	-1337	-1188	-1020	-1020	-1578	-1662	-1409
Large Thermal Reserves	-858	-858	-858	-859	-861	-863	-863	-862	-859	-757	-704	-719	-687	-859
Regional Hydro Maintenance	-4605	-4042	-3787	-3208	-2935	-2037	-1561	-2289	-2632	-2751	-2483	-2360	-2202	-3721
Spinning Reserves	-812	-796	-755	-803	-812	-879	-790	-815	-764	-768	-697	-763	-815	-819
Regional Transmission Losses	-996	-975	-940	-1001	-1009	-1099	-975	-1008	-946	-920	-892	-980	-958	-1010
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-10348</b>	<b>-9745</b>	<b>-8883</b>	<b>-8573</b>	<b>-8357</b>	<b>-7831</b>	<b>-7153</b>	<b>-7998</b>	<b>-8029</b>	<b>-7846</b>	<b>-7450</b>	<b>-7970</b>	<b>-8013</b>	<b>-9440</b>
<b>Total Net Resources</b>	<b>28741</b>	<b>28123</b>	<b>27129</b>	<b>28877</b>	<b>29103</b>	<b>31704</b>	<b>28131</b>	<b>29072</b>	<b>27298</b>	<b>26548</b>	<b>25736</b>	<b>28275</b>	<b>27639</b>	<b>29125</b>
<b>Surplus/Deficits</b>														
Firm Surplus/Deficit	-4085	-4700	-4496	-5071	-7756	-8605	-13277	-11089	-9686	-8817	-9628	-5288	-5160	-4262
<b>Total Surplus/Deficit</b>	<b>-4247</b>	<b>-4862</b>	<b>-4639</b>	<b>-5183</b>	<b>-7926</b>	<b>-8692</b>	<b>-13468</b>	<b>-11230</b>	<b>-9874</b>	<b>-8978</b>	<b>-9789</b>	<b>-5422</b>	<b>-5335</b>	<b>-4421</b>

THIS PAGE INTENTIONALLY LEFT BLANK