Fuel Mix Disclosure Workbook

This workbook is for your use only. You do not need to submit it.

It is designed to help you determine the appropriate number of claims per resource which you then report using the online Fuel Mix Disclosure form. The calculation methods used in this workbook are in alignment with those described in the Fuel Mix Disclosure Guidelines.

It may be especially helpful to utilities that have used renewables to serve load or purchased RECs.

Step 1: Enter your retail load in the empty block on the red Main tab. The blue fields will self-populate as you enter power resources into Tabs A, B, C and/or D.

Step 2: Enter all power resources and RECs using the appropriate tabs (A, B, C and/or D). See notes on each tab to decide where to enter resources.

Step 3: Review the figures that have self-populated on the Main tab. The figure in Line 22 should match the figure in Line 4. If it does not, review your entries to see where there may be an error.

Questions? Workbook error? Contact Angela Burrell, 360-725-3125 or Angela.Burrell@commerce.wa.gov

1990 Fuel Mix Disclosure Workbook Utility Mix	The blue portions of this sheet will self	-populate after Resource have been entered into Tabs A, B, C, D, where applicable.
Retail Load Total (sales + losses)	megawatt hours 4,371,233	You must enter the figure into this box.
Total Power Resources	10,807,759	Combined Total of Tabs A, B, C, D
Resources Excepted from the Av Syst Mix Method Eligible Renew, RECs, BPA Block	411,705	Combined Total of Tabs B, C, D
Removing Excepted Resources from Av Syst Mix Calculati	on	
Adjusted Load (Load minus Exceptions)	3,959,528	
Adjusted Power (Power minus Exceptions)	10,396,054	
Resource Allocation		
Load divided by Power	0.38	
Figuring Claims		
Standard Power Purchases Claim Total (see Tab A)	3,959,528	Tab A claims total multiplied by Average System Mix Ratio
Claims for Resources not in Ratio (line 9)	411,705	Tab B, C, D claims at full value.
Total Claims	4,371,233	When all claims have been entered, this number should equal the Retail Load Total in Line 4.

Claims and Mix	Carbon Emissions							
			Unspecified Claims			CO2 Emissions Factor (short	Emissions (short	Emissions (metric
Fuel Category	Claims by Percent	Specified Claims MWh	MWh	Total Claims MWh	Fuel Mix	tons/MWh)	tons)	tons)
Hydro	62%	2,721,418	165,794	2,887,211	66%	0	-	-
Coal	19%	848,727	145,952	994,680	23%	1.13	1,127,810	1,022,924
Nuclear	1%	46,335	15,133	61,468	1%	0	-	-
Cogen	0%	-	-	-	0%	0	-	-
CCCT - Gas	0%	-	-	-	0%	0	-	-
Simple-Cycle Gas	0%	5,241	3,027	8,268	0%	0.50	4,147	3,761
Biomass	9%	413,217	6,390	419,606	10%	-	-	-
Other	0%	-	-	-	0%	0	-	-
Unspecified/Market	8%							
	100%	4,034,937	336,296	4,371,233	100%		1,131,957	1,026,685

Standard Power Purchases	Confid Level/Bucket	MWh (megawatt hours Sales from Designated Unit: LU or IU	Resource Allocation (Load/Power)	Claims to Report (MWh)	Hydro	Coal N	uclear Co	ogen CCCT - Gas iimple-Cycl	e Ga Biomass	Other nknown/Mark	Total	Hydro	Coal	Nuclear	Cogen	CCCT - Gas Simpl	le-Cycle Ga	Biomass	Other	Unknown/Market	Total
A Slice Total			0.31								0										
Market Purchase Total		0	0.3								0										
andard Power Purchases: Plant Resources (owned or purchased)											0										
fropower, Gas, Coal, Nuclear, Cogen, etc. Include Distributed Generati											0										442.067
	1	1,160,682 1,067,718	0.31	442,067 406,660		100%					100%		442,067 406,660								442,067 406.660
distrip 3 & 4 ortheast	1	1,067,718	0.50			100%			10%		100%		406,660		-	-	1.462	-	-		1,462
orneast ornoe Street	1	21.439	0.34						107%		100%		-		-	-	1,402	-	-		1,462 8.165
st falls	1	97,148	0.3	37,001							100%										37,001
ne Mile	1	114.933	0.3	43,774							100%				-		-	-	-		43,774
tie Falls	1	216,169	0.31	82,332							100%	82,332									82,332
ng Lake	1	458,553	0.31	174,648	100%						100%										174,648
pper Falls	1	76,780	0.31								100%										29,243
abinet Gorse	1	1.200.099	0.31	457.080							100%										457.080
xon Rapids	1	2.039.433	0.30								100%	776.755									776,755
tish Columbia Hydro & Power Authority	2	52,030	0.38	19,817					5% 2%		100%						991	396			19,817
tish Columbia Hydro & Power Authority	2	146,400	0.31						5% 2%		100%						2,788	1,115			55,759
onneville Power Administration	2	62,406	0.31		86%		11%			3%	100%			2,615						713	23,768
nneville Power Administration nneville Power Administration	2	590,026 235,075	0.31	3 224,722 89,533	86%		11%			3%	100%			24,719 9.849						6,742 2.686	224,722 89,533
nneville Power Administration nneville Power Administration	2	235,075	0.31	80,553			11%			3%	100%		-	9,849		-	-	-		2,686 2.496	89,533 83.203
elan County Public Utilities District No. 1	2	80.133	0.3	30.520			****			100%	100%		- 1	3.152				- 1		30,520	30.520
relan County Public Utilities District No. 1	1	451.675	0.3								100%									30.320	172.029
elan County Public Utilities District No. 1	1	205.763	0.31	78,369	100%						100%				-		-	-	-		78.369
lockum Transmission Company	4	4.061	0.31	1.547						100%	100%									1.547	1.547
umbia Storage Power Exchange	1	142.146	0.31		100%						100%	54.139									54.139
litz County Public Utility District	4	1.321	0.31	503						100%	100%									503	503
elas County Public Utility District	1	151.034	0.31								100%										57.524
ellas County Public Utility District	1	41.262	0.38	15.715						100%	100%									15.715	15.715
elas County Public Utility District	1	1.974	0.31	752						100%	100%									752	752
ene Water & Electric Board don Foster (PURPA Aemt)	4	7.605 1.081	0.31		100%					100%	100% 100%	412								2.897	2.897 412
not County Public Utility District No. 2	1	1.081 359.907	0.3								100%		-		-	-	-	-	-		137,077
int County Public Utility District No. 2	1	325,068	0.3								100%										123.808
nt County Public Utility District No. 2	2	249,437	0.31	95,003						100%	100%				-		-	-	-	95,003	95,003
ant County Public Utility District No. 2	2	6,720	0.31	2,559						100%	100%									2,559	2,559
ho Power Company	4	40,463	0.31	15,411						100%	100%									15,411	15,411
Ford Creek Hydro (PURPA)	1	1,085	0.31	413							100%										413
n Day Hydro (PURPA)	1	2,547	0.31								100%										970
est Lindquist (PURPA)	1	3	0.31		100%						100%									- :	1
s Angeles Department of Water & Power	4	700 166,621	0.3i 0.3i	267 63.461						100%	100%									267 63.461	267 63,461
ontana Power Company scific Power & Light Company	2	100,021 21,204	0.31	8 8,076						100%	100%									63,461 8,076	63,461 8,076
cific Northwest Generating Company	4	6.328	0.34	3 2,410						100%	100%		- 1	- 1				- 1		2,410	2,410
nd Oreille County Public Utility District No. 1	1	17,917	0.3	6,824	100%					20074	100%						-			2,420	6,824
lips Ranch (small hydro unit)	1	71	0.31		100%						100%										27
tland General Electric Company	4	1.270	0.31							100%	100%									484	484
set Sound Power & Light Company	2	42.072	0.31	16.024						100%	100%									16.024	16.024
ettle City Lieht	4	92.067	0.31							100%	100%									35.065	35.065
ttle City Light	4	1.574	0.31							100%	100%									599	599
o Creek Hydro (PURPA)	1 4	6.992 3.242	0.3i 0.3i	2.663 1.235						100%	100%									4 225	2.663
omish County Public Utilities District hern California Edison Company	4	3.242 850	0.8							100%	100%									1.235 324	1.235 324
nem California Edison Company of Tacoma	4	75.791	0.31							100%	100%		-			-	-	-		324 28.866	324 28.866
of Tacoma	4	5.098	0.3	1.942						100%	100%		- 1	- 1				- 1		1.942	1.942
of Sookane - Upriver (PURPA)	1	85.987	0.3							20076	100%						-				32.750
h Power & Light Company	4	14.369	0.31	5.473	100%						100%	5.473									5.473
t Kootenay Power, Limited	1	19,429	0.3	7,400	100%						100%	7,400									7,400
tal Standard Power Purchases		10,396,054.00		3,959,528																	
	l											2,721,418	848,727				5,241	413,217		336,296	4,371,233
				4,371,233								62%	19%		0%		0%	9%	0%	8%	100% Claim
				plus renewables								Hydro 165 794	Coal 145.952	Nuclear 15.133	Cogen	CCCT - Gas Simpl	3 027	Biomass 6 390	Other		
Assumptions												2.887.211	145,952 994,680		-		8,268	419,606	_		ssignment of Unspecified aspecified plus Specified
												4,007,411	CBO,MEE	01/409	-	-	0,400	419,000		4,3/1,235 Ur	ispecified plus Specified

REFERENCES
BC Hydro
http://www2.cieedac.sfu.ca/media/oublications/BC2012 report 10 data Final April 12. 201-3.odf

BPA BPA Staff

Net NWPP/Market Mix Methodolox/Ifor power showins in the Unknown blue category above?
Commerce Immunol the 1900 NW Power Pool Net System Mix based on 1990 NW Power Pool Seneration from the EIA and 2000 NW Power Pool Net System Mix from the NW Conservation Council

Emissions Rates
Usine 2000 Emissions Rates oer the Commerce Fuel Mix Disclosure Program based on EIA Annual Outloook Appendices Table A3

Eligible Renewable Power	MWh (megawatt hours)
Vaagen Brothers Lumber Company (PURPA)	34,982
Kettle Falls Boiler	336,285
Wood Power Incorporated	40,438
Total	411,705.00

List by plant name. Use abbreviations or acronymns, etc. This is for your records only.

Include Distributed Generation Wind and Solar sources here.

Renewable Energy Credits from Plants	Units (1 REC= 1 MWh)
Total	-

List by plant name. Use abbreviations or acronymns, etc. This is for your records only.

4,371,233.00 BPA system claims after REC retirements are applied bpa purchases minus recs

need to have a space to do this in the sheet so they know what to enter for bpa purchase instructions should say:Enter RECs after entering purchase total on main page

need to set this up for BPA full requirements customers.

BPA Block Purchase	MWh (megawatt hours)
Block	
Total	0

BPA customers:

Load Following/Full Requirements (100% BPA served): your information is being supplied directly by BPA. Slice Customers: Enter your BPA purchase on Tab A.

Only one utility in Washington is a BPA block customer as defined by BPA.