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 The blue portions of this sheet will self-populate after Resource have been entered into Tabs A, B, C, D, where applicable. Utility Mix megawatt hours Retail Load Total 3,321,329 You must enter the figure into this box. (sales + losses) **Total Power Resources** 22,919,037 Combined Total of Tabs A, B, C, D Combined Total of Tabs B, C, D Resources Excepted from the Av Syst Mix Method Eligible Renew, RECs, BPA Block -Removing Excepted Resources from Av Syst Mix Calculation Adjusted Load (Load minus Exceptions) 3,321,329 Adjusted Power (Power minus Exceptions) 22,919,037 Resource Allocation Load divided by Power 0.14 Figuring Claims Standard Power Purchases Claim Total (see Tab A) 3,321,329 Tab A claims total multiplied by Average System Mix Ratio Claims for Resources not in Ratio (see line 9) Tab B, C, D claims at full value. 3,321,329 **Total Claims** When all claims have been entered, this number should equal the Retail Load Total in Line 4.

s and Mix						Carbon Emissio	ns	
Fuel Category	Claims by Percent	Specified Claims MWh	Unspecified Claims MWh	Total Claims MWh	Fuel Mix	CO2 Emissions Factor (short tons/MWh)	Emissions (short tons)	Emissions (metric
Hydro	30%	1,012,651	61,791	1,074,442	32%	0	-	-
Coal	62%	2,060,987	54,397	2,115,384	64%	1.13	2,398,512	2,175,450
Nuclear	3%	100,353	5,640	105,993	3%	0	-	-
Cogen	1%	22,000		22,000	1%	0	-	-
CCCT - Gas	0%	-	-	-	0%	0	-	-
Simple-Cycle Gas	0%	-	1,128	1,128	0%	0.50	566	513
Biomass	0%	-	2,381	2,381	0%	-	-	-
Other	0%	-		-	0%	0	-	-
Unspecified/Market	4%							
	100%	3,195,991	125,338	3,321,329	100%		2,399,078	2,175,964

		Sales from Designated U	nit (non- Resource Allocation																	-	
tandard Power Purchases	Confid Level/Burket	MWh (megawatt hours retail)		Claims to Report (MWh)	Hwifto Cr	oal Nuclear	Coren CCCT - G	s Simple-Cycle G Biomas:	s Other	Holmown/Mar Tota		Hydro C	Coal	Nuclear C	logen	CCCT - Gas Simple	e.Cycle G Rice	imass I	Other	Unknown/Market	Total
PA Slice Total			0.14	0							0	-									
pot Market Purchase Total		0	0.14								0										
tandard Power Purchases: Plant Resources											0										
ydropower, Gas, Coal, Nuclear, Cogen, etc. Include Distril	buted Generation Hydro re	ources here. Use abbreviations or acronymns, etc. This	is for your records only.			100%					0										
olstrip 3 & 4	1	951,695 151,813	0.14 0.14	137,916 22.000		100%	100%				100%		137,916		22.000						137,91
ojan entralia	1	3.542.601	0.14	22,000 513.379		100%	100%				100%	-	513.379	-	22,000				-		513.37
n Bridger U1	1	9,727.673	0.14	1,409,693		100%					100%	- 1	1,409,693				-				1,409,69
erwin	1	556,990	0.14	80.717	100%						100%	80.717	-,,								80.71
wift	1	723,927	0.14	104,908	100%						100%	104,908									104,90
le .	1	605,489	0.14	87,745	100%						100%	87,745									87,74
1000	1	193,502	0.14	28.041	100%						100%	28.041									28.041
toyle	1	238,417	0.14	34,550	100%						100%	34,550									34,551
n Gate da Springs	1	110,820	0.14	16,060	100%						100%	16,060									16,06
a Springs c Creek	1	62,803 86,996	0.14 0.14	9,101 12,607	100%						100%	9,101 12.607									9,10:
Creek Creek	1	50,297	0.14	7.289	100%						100%	7.289									7.289
rwater	1	100,073	0.14	14,502	100%						100%	14,502		- :			- 1	- 1	-		14,502
olo	1	297,173	0.14	43.065	100%						100%	43.065									43.065
etee	1	181,614	0.14	26,319	100%						100%	26,319									26,319
pect No 2	1	228,109	0.14	33,057	100%						100%	33,057									33,057
Point	1	11,370	0.14	1.648	100%						100%	1.648									1.648
ect No 1	1	23,924	0.14	3,467	100%						100%	3,467									3,467
ect No 3	1	31,678	0.14	4,591	100%						100%	4,591									4,591
sect No 4	1	4,930 3.043	0.14	714	100%						100%	714									714
reek	1	3,043 11,090	0.14	441	100%						100%	441									441
oek vo Falls	1 1	3,930	0.14 0.14	1.607 570	100%						100%	1.607 570									1.607 570
ville Power Administration	2	927,642	0.14	134.430	86.0%		.0%			3.0%	100%	115.610		14.787						4.033	134,430
o. 1 of Chelan County	1	382,891	0.14	55.487	100%	- 11	.0%			3.0%	100%	55,487		14,767	-		-	-	-	4,033	55,487
	1	19,525		2.829									-	-	-				-		
o. 1 of Chelan County	2	11,085	0.14		100%						100%	2,829									2,829
kua Transmission Company	4		0.14	1,606						100%	100%									1,606	1,606
bia Storage Power Exchange	2	282,920	0.14	41,000	100%						100%	41,000									41,000
No. 1 of Douglas County	1	306,875	0.14	44,471	100%						100%	44,471									44,471
io. 1 of Douglas County	2	58,176	0.14	8,431						100%	100%									8,431	8,431
io. 2 of Grant County	1	717,984	0.14	104,047	100%						100%	104,047									104,047
No. 2 of Grant County	1	928,937	0.14	134,618	100%						100%	134,618									134,618
No. 2 of Grant County	2	87,600	0.14	12,695						100%	100%									12,695	12,695
No. 2 of Grant County	2	38,668	0.14	5,604						100%	100%									5,604	5,604
and General Electric	4	24,000	0.14	3,478						100%	100%									3,478	3,478
land General Electric	4	620	0.14	90						100%	100%									90	90
t Sound Power and Light	2	18,950	0.14	2,746						100%	100%									2,746	2,746
City Light	4	19,137	0.14	2,773						100%	100%	-		-					-	2,773	2,773
No. 1 of Snohomish County	4	425	0.14	62						100%	100%	-	_							62	62
na City Light	4	6.270	0.14	909						100%	100%									909	909
ington Water Power Company	2	438.000	0.14	63.473						100%	100%									63,473	63,473
igton Water Power Company	2	20.100	0.14	2,913						100%	100%									2,913	2,913
	2	45,443	0.14	6,585						100%	100%									6.585	6,585
ngton Water Power Company	2	68.597	0.14	9,941						100%	100%									6,585 9.941	9,941
igton Water Power Company	2	16.622	0.14	9,941	1001					100%		2.409								9,941	
Cootenay Power and Light	2	16,622 590.453		2,409 85.566	100%						100%										2,409
ington Public Power Supply System	2	590,453 8.160	0.14			10	00%				100%	-		85,566							85,566
a Tieton	1		0.14	1,183	100%						100%	1,183									1,183
l Standard Power Purchases		22.919.037.00		3.321.329							0	1.013.00	2 000 000	100.35	22.05					425	2 224
				3,321,329.00							Г	1,012,651	2,060,987	100,353	22,000 1%	0%	0%	0%	0%	125,338	3,321,329
											<u> </u>	Hydro	Coal	Nuclear	Cogen	CCCT - Gas Simple				4% Total	100%
	1	I									-	61.791	54.397	5.640	LOZEII .		1.128	2.381			Assignment of
Assumptions		·										1.074.442	2.115.384	105.993	22.000		1.128	2,381		3.321.329	
dro					93.0%			5.0%	2.0%		100.0%	32%	64%	3%	1%	0%	0%	0%			Fuel Mix Perc
					86.0%	11					100.0%	0	1.13	0	0	0	0.50		0		Emissions Rat
NWPP/Market Mix					49.3%	43.4% 4	.5%	0.9%	1.9%		100.0%	-	2,398,512	-	-		566		-	2,399,078	CO2 Emissons (s

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

Net NWPP/Market Mix Methodolon/ flor power showine in the Unknown blue category above?

Commerce Imputed the 1990 NW Power Pool Net System Mix based on 1990 NW Power Pool Generation from the EIA and 2000 NW Power Pool Net System Mix from the NW Conservation Council

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

Eligible Renewable Power	MWh (megawatt hours)	List by plant name. Use abbreviations or acronymns, etc. This is for your records only.
		Include Distributed Generation Wind and Solar sources here.
Total	-	

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.

3,321,329.00 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.