



# BPA Imbalance Activity Report

## December 2011

### Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(22,798)	\$ (548)
under generation	23,931	\$ 596
other		
over generation	(6,677)	\$ (201)
under generation	2,419	\$ 73
total		
over generation	(29,475)	\$ (749)
under generation	26,350	\$ 669
<b>total:</b>	<b>(3,125)</b>	<b>\$ (80)</b>

### Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(15,488)	\$ (435)
under scheduling	11,052	\$ 350
<b>total:</b>	<b>(4,436)</b>	<b>\$ (85)</b>

### Persistent Deviation

sec 1 & 2	events	MWh	\$ thousand*
Negative (generation greater than schedule)			
wind	1	(74)	\$ 2
other	5	(4,465)	\$ 125
<b>total</b>	<b>6</b>	<b>(4,539)</b>	<b>\$ 127</b>
Positive (generation less than schedule)**			
wind	5	518	\$ 34
other	3	1,008	\$ 66
<b>total</b>	<b>8</b>	<b>1,526</b>	<b>\$ 100</b>

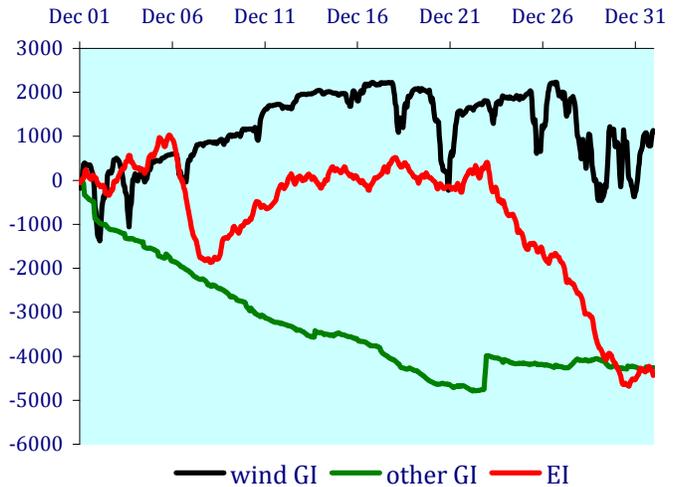
\*charge estimate excludes test projects

\*\*charge estimate does not include GI

### Persistent Deviation events and waivers

	2011 jan	2011 feb	2011 mar	2011 apr	2011 may	2011 jun	2011 jul	2011 aug	2011 sep	2011 oct	2011 nov	2011 dec
events												
total	10	14	14	12	14	8	9	4	18	16	20	14
MWh negative	-884	-904	-1623	-1735	-1359	-184	-736	-574	0	-5058	-2517	-4539
MWh positive	818	2620	1822	652	1683	1511	1278	435	2254	262	2281	1526
waiver requests												
total				1		1						1
MWh negative												-2171
MWh positive				237		359						
granted waivers (full)												
total				1		1						
MWh negative												
MWh positive				237		359						
granted waivers (partial)												
total												
MWh negative												
MWh positive												

MWh of accumulated imbalance



sec 3	events	MWh	Charge*
Negative (generation greater than schedule)			
wind	-	-	-
other	-	-	-
<b>total</b>	<b>-</b>	<b>-</b>	<b>-</b>
Positive (generation less than schedule)**			
wind	-	-	-
other	-	-	-
<b>total</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Persistent Deviation events and waivers

	2010 jan	2010 feb	2010 mar	2010 apr	2010 may	2010 jun	2010 jul	2010 aug	2010 sep	2010 oct	2010 nov	2010 dec
events												
total	30	19	76	44	38	37	30	26	11	8	12	6
MWh negative	-3597	-1819	-14287	-5389	-7406	-5102	-4401	-3395	-1495	-765	-1085	-623
MWh positive	4877	2665	9101	7062	5118	5181	4078	3251	1313	2768	1874	723
waiver requests												
total	4	4	29	2		1	1					
MWh negative	-719	-133	-3795					-582				
MWh positive	120	636	1888	503		191						
granted waivers (full)												
total												
MWh negative												
MWh positive												
granted waivers (partial)												
total												
MWh negative												
MWh positive												

## BPA Imbalance Activity Report reference guide

### Generation Imbalance

Imbalance = Estimated Generation - Actual Generation

over generation	Estimated Generation < Actual Generation, negative value
under generation	Estimated Generation > Actual Generation, positive value

### Energy Imbalance

Imbalance = Actual Load - Scheduled Load

over scheduling	Actual Load < Scheduled Load, negative value
under scheduling	Actual Load > Scheduled Load, positive value

### Persistent Deviation

Definition

section 1 & 2

All hours or schedule periods in which either a negative or positive deviation exceeds both 15 % of schedule and 20 MW for four consecutive hours or more or both 7.5 % of schedule and 10 MW for six consecutive hours or more or both 1.5 % of schedule and 5 MW for twelve consecutive hours or more or both 1.5 % of schedule and 2 MW for twenty-four consecutive hours or more in the same directions.

section 3

A pattern of either positive or negative deviation that occurs generally or at specific times of day.

Penalty

Negative	No credit is given for negative deviation.
Positive	For positive deviation, the charge is the greater of 125% of BPA's highest incremental cost that occurs during that day or 100 mills per kilowatt-hour.

*\*charge estimate excludes test projects*

New projects in test mode (up to 90 days) are exempt from the Persistent Deviation Penalty charge. However, Persistent Deviation events are still tracked.

*\*\*charge estimate does not include GI*

The Persistent Deviation section of this report shows the penalty component of the charge, i.e. \$100/MWh less GI rate