



# BPA Imbalance Activity Report

## April 2014

### Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(107,448)	\$ (1,360)
under generation	100,205	\$ 1,335
other		
over generation	(6,156)	\$ (95)
under generation	6,817	\$ 115
total		
over generation	(113,604)	\$ (1,455)
under generation	107,022	\$ 1,450
<b>total:</b>	<b>(6,581)</b>	<b>\$ (5)</b>

### Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(24,152)	\$ (391)
under scheduling	23,436	\$ 399
<b>total:</b>	<b>(715)</b>	<b>\$ 8</b>

### Persistent Deviation

sec 1, 2	events	MWh*	hours*	\$ thousand**
Negative (generation greater than schedule)				
wind	18	3436	51	\$ (35)
other				
load	1	127	34	\$ (2)
<b>total</b>	<b>19</b>	<b>3563</b>	<b>85</b>	<b>\$ (37)</b>
Positive (generation less than schedule)				
wind	25	3772	81	\$ 55
other	1	112	3	\$ 2
load				
<b>total</b>	<b>26</b>	<b>3884.5</b>	<b>84</b>	<b>\$ 57</b>

\*exempt hours are excluded

\*\*charge estimate does not include GI and test projects

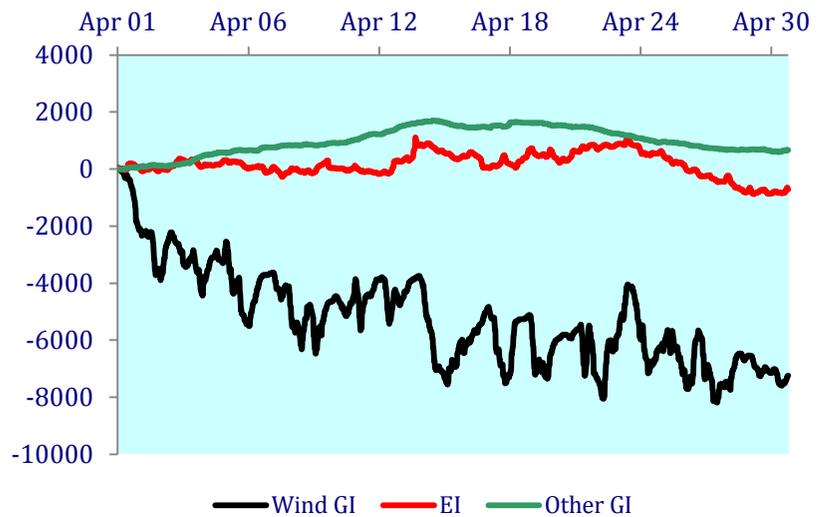
### Persistent Deviation events and waivers

	2013 May	2013 Jun	2013 Jul	2013 Aug	2013 Sep	2013 Oct	2013 Nov	2013 Dec	2014 Jan	2014 Feb	2014 Mar	2014 Apr
events												
total	50	30	60	34	41	37	37	30	38	67	68	45
MWh negative	-4880	-1495	-2480	-1943	-3297	-1278	-1039	-3031	-1214	-1593	-2650	-3563
MWh positive	1372	1289	2867	1514	2095	1436	1292	1478	1240	2761	2218	3884
waiver requests												
total	1											
MWh negative	-286											
MWh positive												
granted waivers (full)												
total												
MWh negative												
MWh positive												
granted waivers (partial)												
total												
MWh negative												
MWh positive												

### Persistent Deviation events and waivers

	2012 Apr	2012 Jun	2012 Jul	2012 Aug	2012 Sep	2012 Oct	2012 Nov	2012 Dec	2013 Jan	2013 Feb	2013 Mar	2013 Apr
events												
total	45	41	46	49	25	47	31	52	35	35	26	30
MWh negative	-2918	-3733	-1873	-2954	-1254	-2530	-3104	-4655	-1904	-1487	-1011	-1526
MWh positive	3378	2030	2559	1722	1345	2982	1073	2470	3130	1567	1393	2122
waiver requests												
total	4		2		1	1		6	2			5
MWh negative					361	26			1037			-958

MWh of accumulated imbalance



### Persistent Deviation Events

	3-hour	6-hour	12-hour	24-hour	total
Negative (generation greater than schedule)					
wind	16	2			18
other				1	1
load					
Positive (generation less than schedule) **					
wind	24		1		25
other					
load	1				1

MWh positive	1184	834	899	108	90
granted waivers (full)					
total	2		3	2	1
MWh negative			261	1037	-479
MWh positive	394			108	
granted waivers (partial)					
total		1			
MWh negative					
MWh positive		50			

## 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 three 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.
<i>*charge estimate excludes test projects</i>	New projects in test mode (up to 90 days) are exempt from the Persistent Deviation Penalty charge. However, Persistent Deviation events are still tracked.
<i>**charge estimate does not include GI</i>	The Persistent Deviation section of this report shows the penalty component of the charge, i.e. \$100/MWh less GI rate