



# BPA Imbalance Activity Report

## March 2014

### Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(59,018)	\$ (894)
under generation	44,788	\$ 908
other		
over generation	(3,133)	\$ (108)
under generation	2,712	\$ 114
total		
over generation	(62,151)	\$ (1,002)
under generation	47,500	\$ 1,022
<b>total:</b>	<b>(14,651)</b>	<b>\$ 20</b>

### Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(11,836)	\$ (221)
under scheduling	14,097	\$ 381
<b>total:</b>	<b>2,262</b>	<b>\$ 160</b>

### Persistent Deviation

sec 1, 2	events	MWh*	hours*	\$ thousand**
Negative (generation greater than schedule)				
wind	28	2429	34	\$ 24
other	0	0	0	\$ -
load	1	220	22	\$ 6
<b>total</b>	<b>29</b>	<b>2650</b>	<b>56</b>	<b>\$ 29</b>
Positive (generation less than schedule)				
wind	35	1728	38	\$ 137
other	1	144	24	\$ 13
load	3	346	37	\$ 33
<b>total</b>	<b>39</b>	<b>2218</b>	<b>99</b>	<b>\$ 183</b>

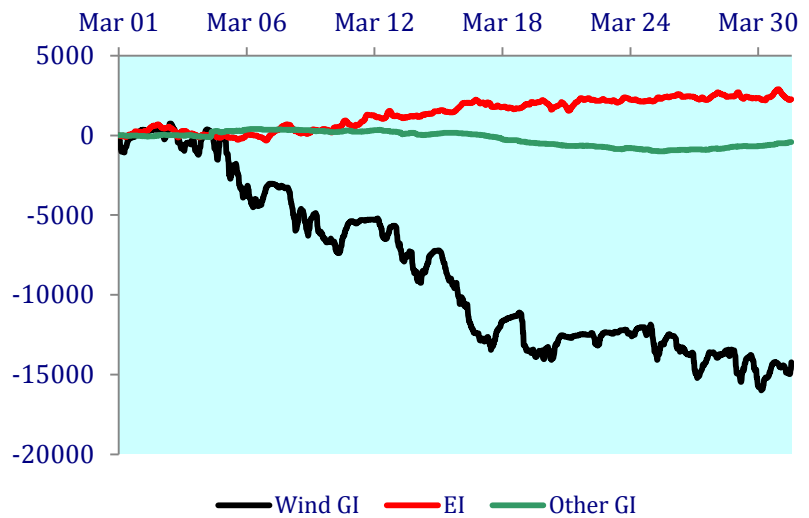
\*exempt hours are excluded

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

### Persistent Deviation events and waivers

	2013 Apr	2013 May	2013 Jun	2013 Jul	2013 Aug	2013 Sep	2013 Oct	2013 Nov	2013 Dec	2014 Jan	2014 Feb	2014 Mar
events												
total	30	50	30	60	34	41	37	37	30	38	67	68
MWh negative	-1526	-4880	-1495	-2480	-1943	-3297	-1278	-1039	-3031	-1214	-1593	-2650
MWh positive	2122	1372	1289	2867	1514	2095	1436	1292	1478	1240	2761	2218
waiver requests												
total	5	1										
MWh negative	-958	-286										
MWh positive	90											
granted waivers (full)												
total	1											
MWh negative	-479											
MWh positive												
granted waivers (partial)												
total												
MWh negative												
MWh positive												

MWh of accumulated imbalance



### Persistent Deviation Events

	3-hour	6-hour	12-hour	24-hour	total
Negative (generation greater than schedule)					
wind	24	4	0	0	28
other	0	0	0	0	0
load	0	0	1	0	1
Positive (generation less than schedule) **					
wind	31	2	2	0	35
other	0	0	0	1	1
load	0	2	0	1	3

## Persistent Deviation events and waivers

	2012 Mar	2012 Apr	2012 Jun	2012 Jul	2012 Aug	2012 Sep	2012 Oct	2012 Nov	2012 Dec	2013 Jan	2013 Feb	2013 Mar
<b>events</b>												
total	40	45	41	46	49	25	47	31	52	35	35	26
MWh negative	-3999	-2918	-3733	-1873	-2954	-1254	-2530	-3104	-4655	-1904	-1487	-1011
MWh positive	3683	3378	2030	2559	1722	1345	2982	1073	2470	3130	1567	1393
<b>waiver requests</b>												
total	21	4		2		1	1		6	2		
MWh negative	-1156					361	26			1037		
MWh positive	3341	1184		834					899	108		
<b>granted waivers (full)</b>												
total	19	2							3	2		
MWh negative	-1156								261	1037		
MWh positive	3097	394								108		
<b>granted waivers (partial)</b>												
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.

*\*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