



# BPA Imbalance Activity Report

## February 2014

### Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(38,836)	\$ (1,626)
under generation	38,690	\$ 2,110
other		
over generation	(2,938)	\$ (168)
under generation	2,715	\$ 203
total		
over generation	(41,774)	\$ (1,793)
under generation	41,405	\$ 2,313
<b>total:</b>	<b>(369)</b>	<b>\$ 520</b>

### Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(11,976)	\$ (595)
under scheduling	11,339	\$ 733
<b>total:</b>	<b>(637)</b>	<b>\$ 138</b>

### Persistent Deviation

sec 1, 2	events	MWh*	hours*	\$ thousand**
Negative (generation greater than schedule)				
wind	22	1049	20	\$ 34
other	1	203	21	\$ 8
load	3	341	25	\$ 10
<b>total</b>	<b>26</b>	<b>1593</b>	<b>66</b>	<b>\$ 52</b>
Positive (generation less than schedule)				
wind	39	2606	47	\$ 123
other	1	68	3	\$ 4
load	1	87	3	\$ 3
<b>total</b>	<b>41</b>	<b>2761</b>	<b>53</b>	<b>\$ 131</b>

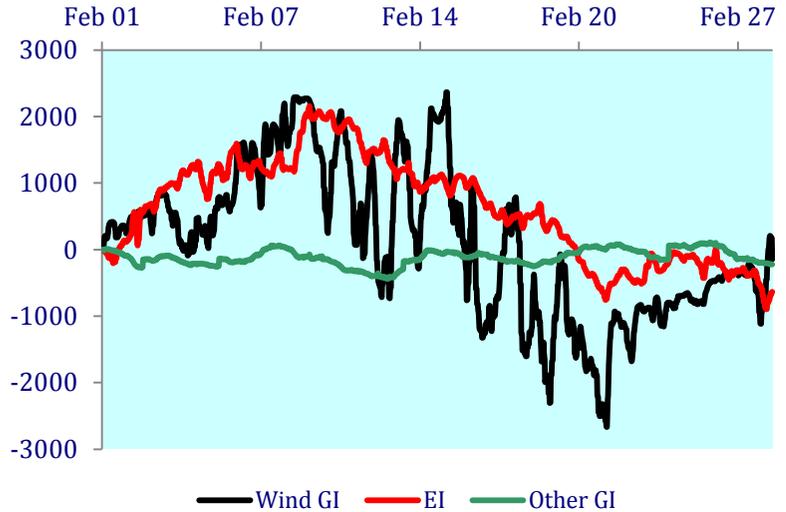
\*exempt hours are excluded

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

### Persistent Deviation events and waivers

	2013 March	2013 April	2013 May	2013 Jun	2013 Jul	2013 Aug	2013 Sep	2013 Oct	2013 Nov	2013 Dec	2014 Jan	2014 Feb
events												
total	26	30	50	30	60	34	41	37	37	30	38	67
MWh negative	-1011	-1526	-4880	-1495	-2480	-1943	-3297	-1278	-1039	-3031	-1214	-1593
MWh positive	1393	2122	1372	1289	2867	1514	2095	1436	1292	1478	1240	2761
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	21	1	0	0	22
other	0	0	1	0	1
load	1	1	1	0	3
Positive (generation less than schedule) **					
wind	35	4	0	0	39
other	1	0	0	0	1
load	1	0	0	0	1

## Persistent Deviation events and waivers

	2012 Feb	2012 Mar	2012 Apr	2012 Jun	2012 Jul	2012 Aug	2012 Sep	2012 Oct	2012 Nov	2012 Dec	2013 Jan	2013 Feb
<b>events</b>												
total	24	40	45	41	46	49	25	47	31	52	35	35
MWh negative	-1998	-3999	-2918	-3733	-1873	-2954	-1254	-2530	-3104	-4655	-1904	-1487
MWh positive	1165	3683	3378	2030	2559	1722	1345	2982	1073	2470	3130	1567
<b>waiver requests</b>												
total	17	21	4		2		1	1		6	2	
MWh negative	-390	-1156					361	26				1037
MWh positive	3309	3341	1184		834					899	108	
<b>granted waivers (full)</b>												
total	17	19	2							3	2	
MWh negative	-390	-1156								261	1037	
MWh positive	3309	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