



BPA Imbalance Activity Report

April 2013

Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(55,588)	\$ (894)
under generation	43,990	\$ 972
other		
over generation	(3,315)	\$ (97)
under generation	1,907	\$ 71
total		
over generation	(58,904)	\$ (991)
under generation	45,897	\$ 1,043
total:	(13,007)	\$ 51

Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(13,855)	\$ (248)
under scheduling	9,348	\$ 251
total:	(4,507)	\$ 3

Persistent Deviation

sec 1, 2	events	MWh*	hours*	\$ thousand**
Negative (generation greater than schedule)				
wind	11	1257	18	\$ 24,633
other	0	0	0	\$ -
load	2	268	30	\$ 7,777
total	13	1526	48	\$ 32,409
Positive (generation less than schedule)				
wind	13	1403	46	\$ 119,051
other	1	90	3	\$ 7,484
load	3	630	33	\$ 47,999
total	17	2122	82	\$ 174,534

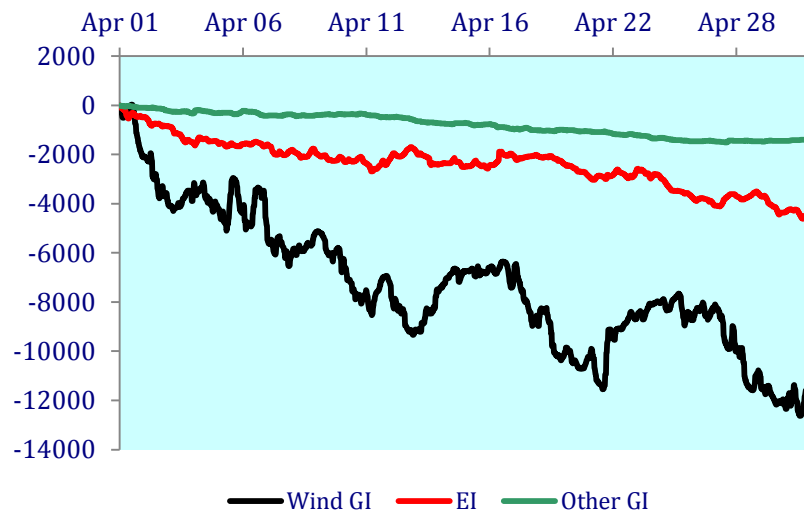
*exempt hours are excluded

**charge estimate does not include GI and test projects

Persistent Deviation events and waivers

	2012 May	2012 Jun	2012 Jul	2012 Aug	2012 Sep	2012 Oct	2012 Nov	2012 Dec	2013 Jan	2013 Feb	2013 March	2013 April
events												
total	45	41	46	49	25	47	31	52	35	35	26	28
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			
MWh negative					361	26			1037			
MWh positive	1184		834					899	108			
granted waivers (full)												
total	2							3	2			
MWh negative								261	1037			
MWh positive	394								108			
granted waivers (partial)												
total			1									
MWh negative												
MWh positive				50								

MWh of accumulated imbalance



Persistent Deviation Events

	3-hour	6-hour	12-hour	24-hour	total
Negative (generation greater than schedule)					
wind	11	0	0	0	11
other	0	0	0	0	0
load	0	0	2	0	2
Positive (generation less than schedule) **					
wind	10	2	0	1	13
other	1	0	0	0	1
load	1	1	0	1	3

Persistent Deviation events and waivers

	2011 May	2011 Jun	2011 Jul	2011 Aug	2011 Sep	2011 Oct	2011 Nov	2011 Dec	2012 Jan	2012 Feb	2012 Mar	2012 Apr
events												
total	14	8	9	4	18	16	20	14	14	25	24	40
MWh negative	-1359	-184	-736	-574	0	-5058	-2517	-4539	-476	-1732	-1998	-3999
MWh positive	1683	1511	1278	435	2254	262	2281	1526	855	1540	1165	3683
waiver requests												
total		1					5	3		4	17	21
MWh negative								-2171		-194	-390	-1156
MWh positive		359					1,691	296		698	3309	3341
granted waivers (full)												
total		1					4			3	17	19
MWh negative											-390	-1156
MWh positive		359					1493			698	3309	3097
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 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.
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section 3	A pattern of either positive or negative deviation that occurs generally or at specific times of day.
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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