



BPA Imbalance Activity Report

September 2013

Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(46,112)	\$ (1,337)
under generation	40,197	\$ 1,132
other		
over generation	(4,976)	\$ (148)
under generation	4,105	\$ 131
total		
over generation	(51,088)	\$ (1,485)
under generation	44,302	\$ 1,263
total:	(6,786)	\$ (222)

Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(12,095)	\$ (365)
under scheduling	7,252	\$ 227
total:	(4,843)	\$ (139)

Persistent Deviation

actual billing may differ

sec 1, 2 & 3	events	MWh*	\$ thousand*
Negative (generation greater than schedule)			
wind	15	(1,556)	\$ 50
other	6	(1,741)	\$ 56
total	21	(3,297)	\$ 105
Positive (generation less than schedule)**			
wind	17	1,731	\$ 106
other	3	364	\$ 22
total	20	2,095	\$ 128

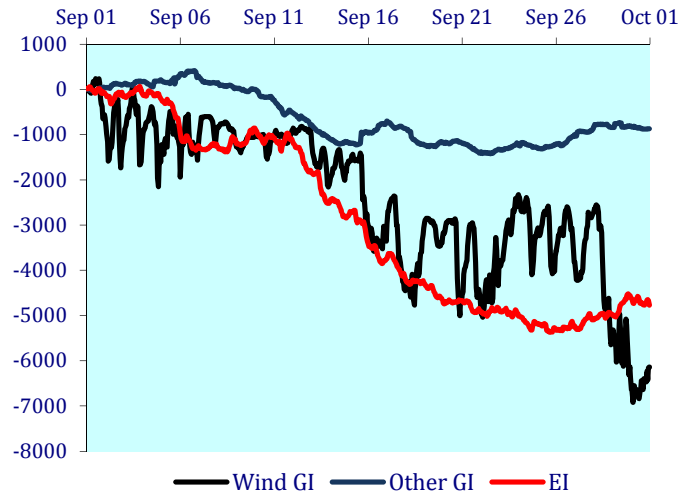
*charge estimate excludes test projects

**charge estimate does not include GI

Persistent Deviation events and waivers

	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013
	oct	nov	dec	jan	feb	mar	apr	may	jun	jul	aug	sep
events												
total	47	31	52	35	35	26	30	50	30	60	34	41
MWh negative	-2530	-3104	-4655	-1904	-1487	-1011	-1526	-4880	-1495	-2480	-1943	-3297
MWh positive	2982	1073	2470	3130	1567	1393	2122	1372	1289	2867	1514	2095
waiver requests												
total	1		6	2			2	1				
MWh negative	-26			-1037			-734	-286				
MWh positive			899	108			90					
granted waivers (full)												
total			3	2								
MWh negative			-261	-1037								
MWh positive				108								
granted waivers (partial)												
total												
MWh negative												
MWh positive												

MWh of accumulated imbalance



Persistent Deviation Events

	3-hour	6-hour	12-hour	24-hour	Pattern	total
Negative (generation greater than schedule)						
wind	11	3	0	1	0	15
other	3	0	0	3	0	6
total	14	3	0	4	0	21
Positive (generation less than schedule)**						
wind	15	2	0	0	0	17
other	1	0	0	2	0	3
total	16	2	0	2	0	20

Persistent Deviation events and waivers

	2011 oct	2011 nov	2011 dec	2012 jan	2012 feb	2012 mar	2012 apr	2012 may	2012 jun	2012 jul	2012 aug	2012 sep
events												
total	16	20	14	14	25	24	40	45	41	46	49	25
MWh negative	-5058	-2517	-4539	-476	-1732	-1998	-3999	-2918	-3733	-1873	-2954	-1254
MWh positive	262	2281	1526	855	1540	1165	3683	3378	2030	2559	1722	1345
waiver requests												
total		5	3		4	17	21	4		2		1
MWh negative			-2171		-194	-390	-1156					-361
MWh positive		1691	296		698	3309	3097	1184		834		
granted waivers (full)												
total		4			3	17		2				
MWh negative						-390						
MWh positive		1493			698	3309		394				
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.

**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