

Replacement Capacity Issues

IASTF

June 27, 2007

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Monitoring Analytics

Competitive Buyback Bids for Physical Resources

- **A Market Seller associated with a physical resource that clears in a BRA cannot increase its profit by buying back the obligation**
- **“Rebid at Cost” assumes the Market Seller has no avoidable cost (ACR)**
- **Incorrect assumption for long lived assets**
- **A Market Seller of a physical resource that does not clear in any capacity auction for a delivery year will operate the unit to sell energy**



Rebid at Cost

- Resource offers into BRA at the Avoided Cost Rate (ACR) of \$80 per MW-day
- Resource clears at \$110 per MW-day
- BRA net = $\$110 - \$80 = \$30/\text{MW-day}$
- Market Seller submits a buyback bid in the 1st IA at \$80 per MW-day and clears at \$60
- IA net = $\$110 - \$60 = \$50/\text{MW-day}$
- Overall IA net = $\$110 - \$60 - \$80 = -\30
- If the Market Seller operates this resource, then Market Seller is better off only if IA price is zero



Rebid at Cost

- **BRA price – IA price – ACR > BRA price - ACR**
- **IA price < 0**



Speculative Rebidding

- Resource clears the BRA at \$110 per MW-day
- There is no underlying physical asset
- Market Seller submits a buyback bid in the 1st IA at \$80 per MW-day and clears at \$60
- Since there is no asset and no associated cost, the Market Seller profits if the buy back price is below the BRA price
- Market Seller net = \$110 - \$60 = \$50/MW-day



Competitive Buyback Bids

- **The competitive IA bid for seller with physical resource is zero**
- **Actual Incremental Auction buyback bids are generally not consistent with competitive behavior for long lived physical resources**
- **The competitive IA bid for seller with no physical resource is any offer less than BRA price**
- **A significant number of bids in Incremental Auctions are consistent with speculative bidding**



Physical Resource Rules for DR

- **MMU Replacement Capacity Report shows Demand Resource capacity obligations are replaced at a disproportionately greater rate than other resource types**
- **Current rules require that Planned DR must be a specific, physical resource (a specific customer and a specific site, but current rules do not require a contract)**



Physical Resource Rules for DR

- **Market Monitor recommends:**
 - **Current rules be implemented as written**
 - **DR providers have a signed contract six months prior to capacity auction**



RPM commitments for all Capacity Resources: June 1, 2007 to June 1, 2017

	UCAP (MW)			RPM Commitment Shortage	RPM Commitments Less Commitment Shortage
	RPM Cleared	Adjustments to Cleared	Net Replacements		
01-Jun-07	129,409.2	0.0	0.0	(8.1)	129,401.1
01-Jun-08	130,629.8	0.0	(766.5)	(246.3)	129,617.0
01-Jun-09	134,030.2	0.0	(2,068.2)	(14.7)	131,947.3
01-Jun-10	134,036.2	0.0	(4,179.0)	(8.8)	129,848.4
01-Jun-11	134,182.6	0.0	(6,717.6)	(79.3)	127,385.7
01-Jun-12	141,295.6	(11.7)	(9,400.6)	(157.2)	131,726.1
01-Jun-13	159,844.5	0.0	(12,235.3)	(65.4)	147,543.8
01-Jun-14	161,214.4	(9.4)	(13,615.9)	(1,208.9)	146,380.2
01-Jun-15	173,845.5	(326.1)	(11,849.4)	(1,822.0)	159,848.0
01-Jun-16	179,773.6	(24.6)	(16,157.5)	(709.9)	162,881.6
01-Jun-17	180,590.5	0.0	(13,982.7)	(43.7)	166,564.1



Net replacements to cleared capacity by resource classifications: June 1, 2007 to June 1, 2017

	All Capacity Resources	Generation	Internal Generation	Internal Generation in Service	Internal Generation Not in Service	External Generation	Demand Resources	Energy Efficiency Resources
01-Jun-07	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
01-Jun-08	(0.6%)	(0.6%)	(0.6%)	(0.6%)	(7.7%)	(0.7%)	(7.2%)	
01-Jun-09	(1.5%)	(1.2%)	(1.4%)	(1.6%)	41.8%	13.6%	(53.2%)	
01-Jun-10	(3.1%)	(2.8%)	(2.6%)	(2.6%)	(6.1%)	(10.2%)	(53.6%)	
01-Jun-11	(5.0%)	(4.3%)	(4.3%)	(3.8%)	(29.0%)	(0.8%)	(57.6%)	0.3%
01-Jun-12	(6.7%)	(5.4%)	(5.4%)	(5.5%)	2.2%	(8.1%)	(25.8%)	(5.2%)
01-Jun-13	(7.7%)	(6.1%)	(5.9%)	(5.7%)	(11.9%)	(19.7%)	(30.7%)	13.3%
01-Jun-14	(8.4%)	(4.9%)	(4.4%)	(4.6%)	0.8%	(22.1%)	(45.0%)	19.0%
01-Jun-15	(6.8%)	(4.7%)	(5.0%)	(4.6%)	(15.8%)	3.0%	(31.3%)	28.2%
01-Jun-16	(9.0%)	(6.9%)	(5.4%)	(4.2%)	(25.6%)	(37.9%)	(36.2%)	3.5%
01-Jun-17	(7.7%)	(6.2%)	(6.2%)	(4.0%)	(30.5%)	(5.3%)	(32.6%)	10.2%

Total replacements to cleared capacity by resource classification: June 1, 2007 to June 1, 2017

	All Capacity Resources	Generation	Internal Generation	Internal Generation in Service	Internal Generation Not in Service	External Generation	Demand Resources	Energy Efficiency Resources
01-Jun-07	(0.1%)	(0.1%)	(0.1%)	(0.1%)	0.0%	0.0%	0.0%	
01-Jun-08	(2.0%)	(2.0%)	(2.0%)	(2.0%)	(7.7%)	(1.3%)	(9.8%)	
01-Jun-09	(4.0%)	(3.7%)	(3.6%)	(3.5%)	(4.8%)	(12.5%)	(56.6%)	
01-Jun-10	(5.3%)	(5.0%)	(4.8%)	(4.8%)	(6.2%)	(12.1%)	(55.6%)	
01-Jun-11	(8.1%)	(7.3%)	(7.2%)	(6.8%)	(29.4%)	(13.1%)	(63.7%)	(1.0%)
01-Jun-12	(12.5%)	(10.4%)	(10.3%)	(10.4%)	(3.4%)	(19.2%)	(44.2%)	(25.2%)
01-Jun-13	(13.4%)	(8.8%)	(8.6%)	(8.5%)	(12.5%)	(21.4%)	(71.8%)	(70.4%)
01-Jun-14	(13.6%)	(8.2%)	(7.5%)	(7.5%)	(7.2%)	(36.8%)	(62.3%)	(64.9%)
01-Jun-15	(10.7%)	(6.9%)	(6.9%)	(6.5%)	(17.4%)	(6.8%)	(47.0%)	(39.5%)
01-Jun-16	(14.8%)	(10.9%)	(8.9%)	(7.8%)	(26.0%)	(52.9%)	(54.4%)	(77.8%)
01-Jun-17	(12.5%)	(9.9%)	(9.4%)	(7.2%)	(33.8%)	(24.8%)	(45.4%)	(36.3%)

Sources of replacement capacity for all Capacity Resources: June 1, 2007 to June 1, 2017

	UCAP (MW)											
	Replacement Transactions				Locational UCAP Transactions				Excess ILR MW Credits	Commitment Reductions using Replacements	Commitment Additions on Replacement Resources	Net Replacements
	Cleared Buy Bids	Gen	DR	EE	Gen	DR	EE	Excess Commitment Credits				
01-Jun-07	0.0	118.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	118.5	118.5	0.0
01-Jun-08	766.5	1,819.4	15.0	0.0	0.0	0.0	0.0	0.0	0.0	2,600.9	1,834.4	766.5
01-Jun-09	1,708.6	3,253.1	31.1	0.0	35.8	0.0	0.0	0.0	359.7	5,388.3	3,320.1	2,068.2
01-Jun-10	1,816.4	2,595.5	19.4	0.0	335.7	0.0	0.0	959.9	1,403.5	7,130.4	2,951.4	4,179.0
01-Jun-11	1,805.2	3,467.1	98.3	1.0	538.1	12.7	0.0	2,735.2	2,177.2	10,834.8	4,117.2	6,717.6
01-Jun-12	9,185.9	4,650.0	1,597.5	133.0	1,937.6	13.2	0.0	213.4	0.0	17,730.6	8,330.0	9,400.6
01-Jun-13	12,021.2	3,214.3	4,403.9	708.2	798.6	26.3	48.9	214.2	0.0	21,435.6	9,200.3	12,235.3
01-Jun-14	13,619.7	2,935.2	2,527.2	791.5	1,878.2	45.8	112.3	0.0	0.0	21,909.9	8,294.0	13,615.9
01-Jun-15	11,850.0	2,736.2	2,237.6	651.3	750.5	201.5	153.9	0.0	0.0	18,581.0	6,731.6	11,849.4
01-Jun-16	16,142.1	4,311.0	2,116.8	1,318.6	2,245.9	297.5	51.6	101.8	0.0	26,585.3	10,427.8	16,157.5
01-Jun-17	11,873.3	5,221.2	1,339.8	708.7	972.6	180.9	147.6	2,153.0	0.0	22,597.1	8,614.4	13,982.7



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