

#### 2008 Year-End FERC Report on NYISO's Demand Response Programs

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Price Responsive Load Working Group Rensselaer, NY January 29, 2009

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#### Program Participation Summary by CSP Type as of August 31, 2008

		EDRP <sup>(1)</sup>			10	ICAP UnSold <sup>(2)</sup>			ICAP <sup>(3)</sup>			DADRP <sup>(4)</sup>		
CSP Type #	Agent Type	# CSP	# Part.	MW	# CSP	# Part.	MW	# CSP	# Part.	MW	# CSP	# Part.	MW	
24	Aggregator	3	44	4.4	1	1	0.1	21	3033	1212.7	2	30	12.0	
	Curtailment Program													
0	End-Use Customer	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	
7	Direct Customer	0	0	0.0	0	0	0.0	7	37	124.5	0	0	0.0	
4	LSE	0	0	0.0	0	0	0.0	4	167	276.4	6	7	44.4	
7	Transmission Owner	7	375	360.0	0	0	0.0	4	54	130.3	3	13	275.0	
42	Total	10	419	364.4	1	1	0.1	36	3291	1743.9	11	50	331.4	

Note 1: The sum of EDRP and ICAP UnSold = Total EDRP.

Note 2: Participants in the ICAP program with UnSold capacity are considered EDRP resources in the month(s) that capacity is unsold. MW represent reductions registered in the ICAP program, but not sold.

Note 3: MW represent reduction MW sold in the ICAP program.

Note 4: Total NYISO participation is not necessarily the sum of all programs due to the rules that state that participants are allowed to participate in a reliability program (EDRP or ICAP) and economic (DADRP or DSASP).

- Increase of 1 aggregator and 4 direct customers
- Decrease of 3 non-TO LSEs
- 3 aggregators registered resources in EDRP in 2008
- 2 new DADRP resources (12MW)
- Aggregators have 92% of participating resources and 70% of registered MW in ICAP/SCR



## **2008 Participation by Zone**

	EDF	<b>RP</b> <sup>(1)</sup>	ICAP UI	nSold <sup>(2)</sup>	ICA	<b>\P</b> <sup>(3)</sup>	DADRP <sup>(4)</sup>		
Zone	#	MW	#	MW	#	MW	#	MW	
A	22	22.3	0	0.0	285	406.7	4	58.0	
В	12	6.6	0	0.0	128	122.6	1	2.8	
С	55	22.7	0	0.0	170	167.1	2	38.0	
D	12	5.0	0	0.0	14	114.4	1	100.0	
E	38	35.9	0	0.0	105	48.5	1	10.0	
F	41	39.6	0	0.0	116	121.4	8	92.0	
G	26	30.4	0	0.0	87	49.0	1	9.0	
Н	10	6.9	0	0.0	9	3.3	0	0.0	
I	21	7.0	0	0.0	75	32.4	0	0.0	
J	150	132.6	1	0.1	1691	496.4	2	6.6	
K	32	55.4	0	0.0	611	182.1	30	15.0	
Total	419	364.4	1	0.1	3291	1743.8	50	331.4	

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#### **Targeted Demand Response**

#### EDRP Resources registered in the Targeted Demand Response Program - Zone J

	J	J1	J2	J3	J4	J5	J6	J7	J8	J9	Total
MW	33.04	0.88	4.76	9.8	7.06	8.28	2.1	2	7	57.7	132.62
Participants	80	5	6	12	6	11	7	5	15	3	150

#### ICAP/SCR Participants registered in the Targeted Demand Response Program – Zone J

	J	J1	J2	J3	J4	J5	J6	J7	J8	J9	Total
MW	82.086	54.902	38.145	46.288	28.975	49.386	53.271	58.532	81.025	3.79	496.4
Participants	303	92	150	232	36	236	126	202	299	15	1691



## **Program Enrollment Changes**

	20	07	20	08		nange From o 2008	Subscribed MW per Participant			
	Count	MW	Count	MW	Participant Count	Subscribed MW	2007	2008	Percent Change	
EDRP	707	456.7	419	364.4	-41%	-20%	0.65	0.87	35%	
ICAP UnSold	12	6.8	1	0.1	-92%	-99%	0.57	0.10	-82%	
ICAP	1986	1338.5	3291	1743.8	66%	30%	0.67	0.53	-21%	
DADRP	20	319.4	50	50 331.4		4%	15.97	6.63	-58%	

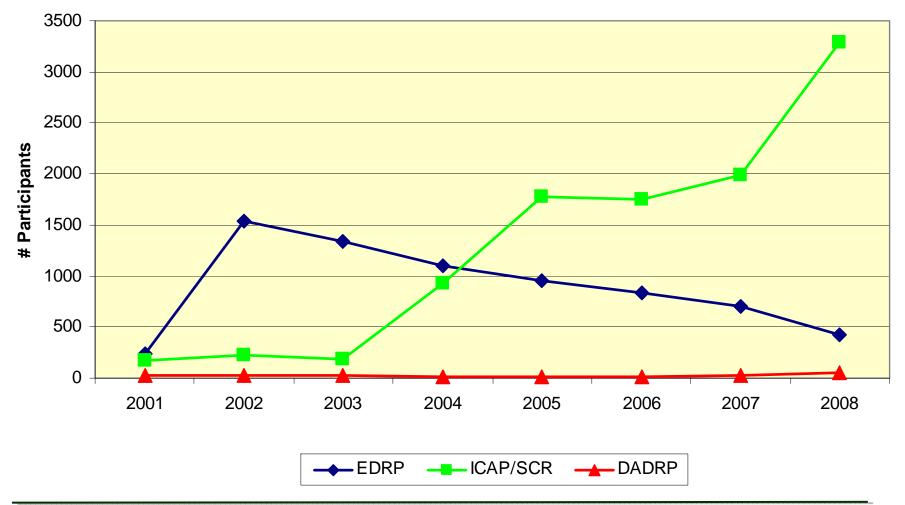
- EDRP: LIPA terminated its participation
- SCR: Aggregations continue to increase
- DADRP: 2 new resources one is an aggregation



# **Program Participant History**

**Individual Participants** 

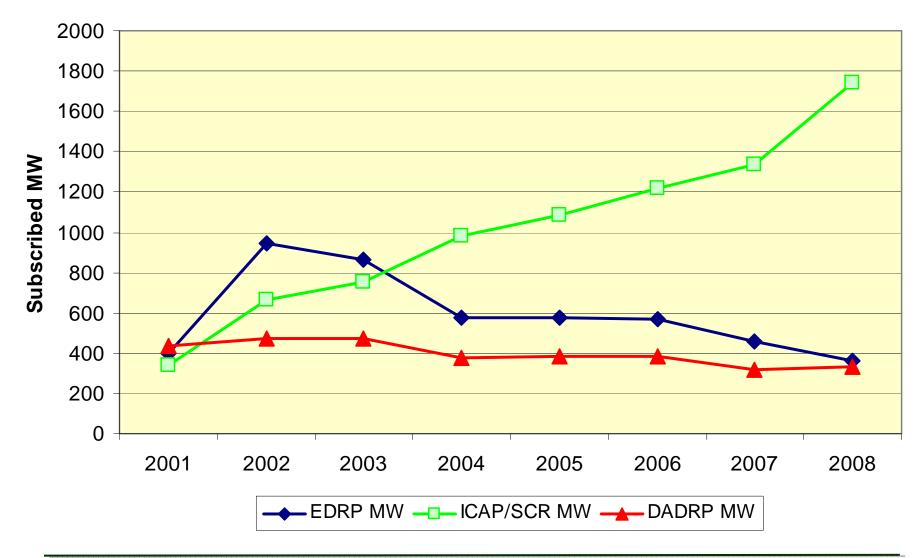
ICAP participants aggregated 2001 - 2003. Disaggregation of ICAP resources began in 2004



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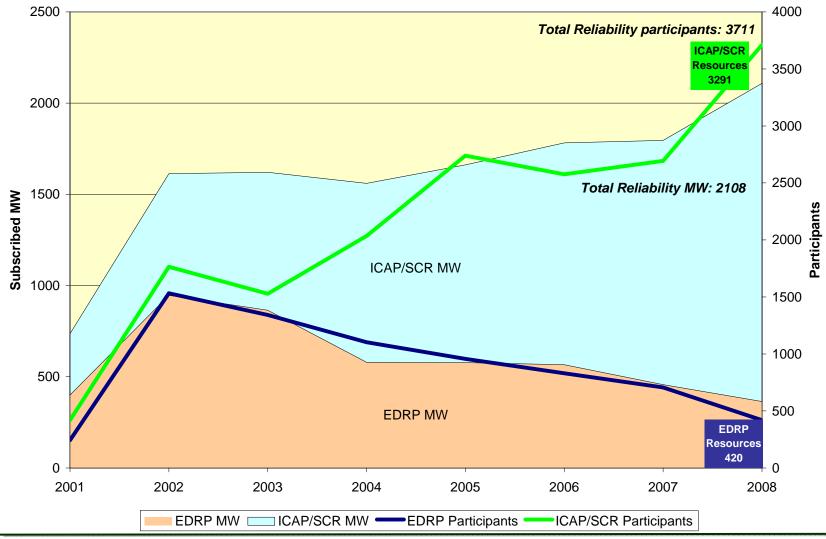


#### **Registered MW by Program**





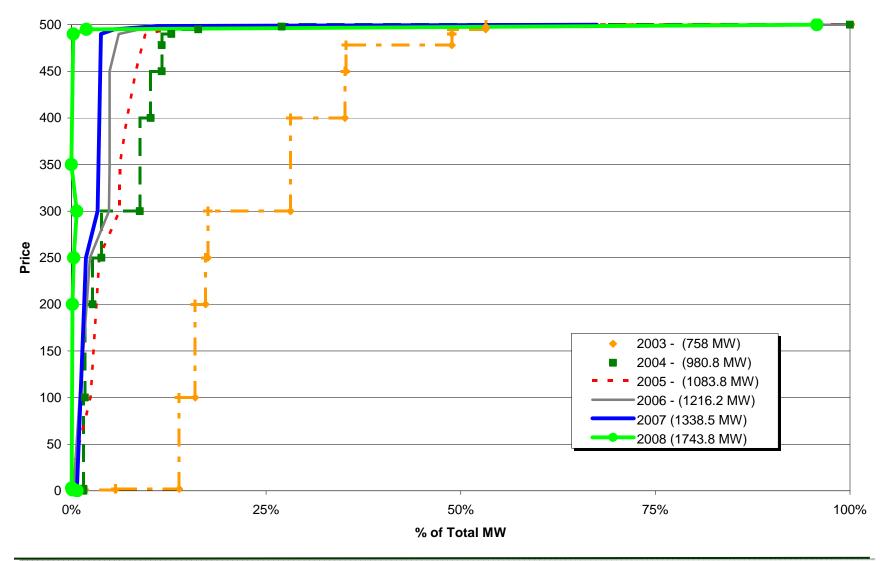
#### Historical Program Growth EDRP & ICAP/SCR



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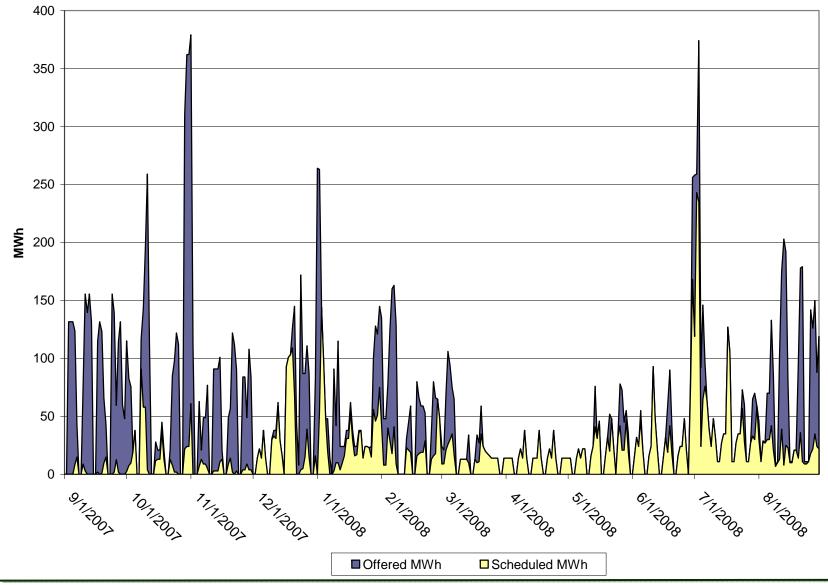


#### **ICAP/SCR Strike Price Curves**





#### **DADRP MWh: Offered vs. Scheduled**



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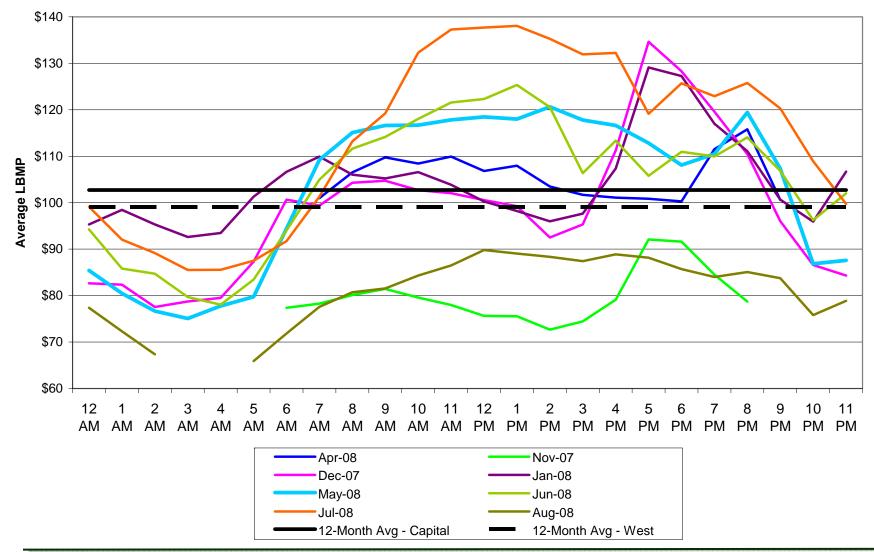
# **DADRP Offer Activity**

	2008	2007	% change
Total Offer Hours	7,034	6,860	3%
Scheduled Hours*	5,128	2,509	104%
Offered MWh	20,364	31,943	-36%
Scheduled MWh	7,727	4,152	86%
Average Offer	2.90	4.66	-38%
Average Schedule	1.51	1.65	-9%

\*Scheduled hours are cumulative for all resources, not unique.



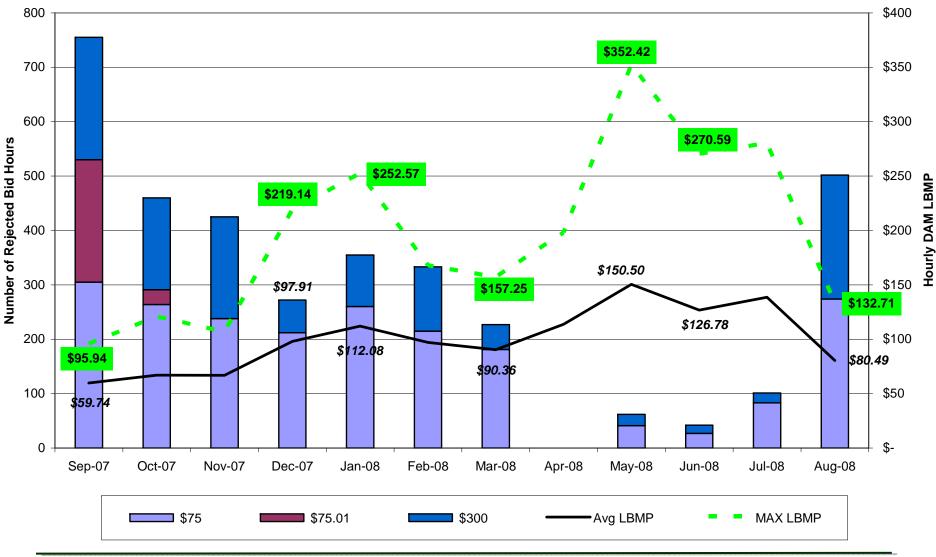
# Average Hourly DAM LBMP for Scheduled DADRP bids (selected months)



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### **Rejected DADRP Bids by Month**





## **DADRP Program Summary**

	Scheduled DADRP MWh	Total Scheduled Hours	Average Hourly Schedule (MWh)	Program Payments**
2001	2,694	531	5.07	\$ 217,487
2002	6,176	1,529	4.04	\$ 110,216
2003	4,257	1,725	2.47	\$ 263,311
2004	3,535	1,275	2.77	\$ 209,624
2005	2,070	464	4.46	\$ 172,376
2006	3,479	1,343	2.59	\$ 332,941
2007	4,152	2,509	1.65	\$ 365,862
2008	7,727	5,128	1.51	\$ 801,108

\*\* Total payments shown for 2001 are July and August. In 2002, payment totals include event months of April, July and August.

Beginning in 2003, Program Payments reflect payments for scheduled reductions between September of the previous year and August of the reporting year.



#### DADRP Average Price Reductions (Summer Season)

	Scheduled DADRP MWh	Prog	gram Payments	Average Price Reduction (\$)	Average Hourly Schedule (MWh)
2001	2,694	\$	217,487	\$ 0.58	5.07
2002	1,468	\$	110,216	\$ 0.30	6.99
2003	1,752	\$	121,144	\$ 0.12	2.79
2004	675	\$	40,651	\$ 0.07	3.04
2005	829	\$	77,885	\$ 0.10	4.02
2006	295	\$	29,821	\$ 0.05	1.53
2007	765	\$	64,737	\$ 0.04	1.67
2008	3,177	\$	348,509	\$ 2.05	1.71

- Summer 2008 scheduled MWh are 41% of scheduled MWh and 43.5% of DADRP payments for analysis period (09/01/07 – 08/31/08)
- Average price reduction calculation shown above reflects assumption that DADRP resource is marginal unit
- 2008 average price reduction for Summer is \$0.59/MWh when DADRP unit is not the marginal unit



### DADRP Average Price Reduction by Month

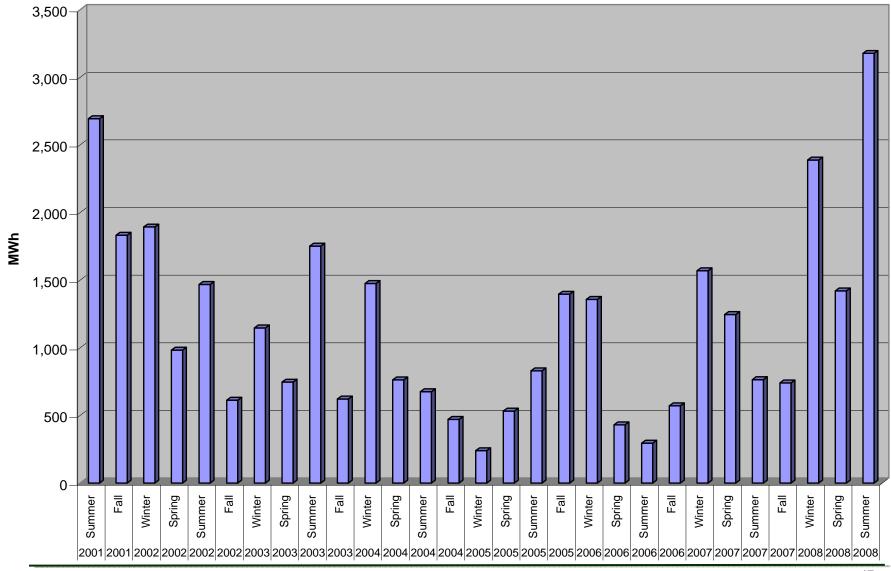
	Performance MWh		Program Payments		erage DAM LBMP (\$) - Scheduled Hours		Average Price Reduction (\$)	Number of Scheduled Hours**
Sep-07	80	\$	6,214.71	\$	77.30	\$	0.15	58
Oct-07	471	\$	39,385.73	\$	81.29	\$	0.59	179
Nov-07	190	\$	15,679.79	\$	79.94	\$	0.18	125
Dec-07	869	\$	90,905.00	\$	98.36	\$	2.04	344
Jan-08	999	\$	108,516.28	\$	104.24	\$	2.68	465
Feb-08	520	\$	47,474.83	\$	88.33	\$	1.70	335
Mar-08	426	\$	38,200.49	\$	85.59	\$	0.58	324
Apr-08	396	\$	41,777.97	\$	105.71	\$	1.01	313
May-08	599	\$	64,444.96	\$	102.88	\$	2.25	435
Jun-08	845	\$	92,452.44	\$	104.33	\$	4.69	462
Jul-08	1,694	\$	201,087.39	\$	113.81	\$	0.98	597
Aug-08	638	\$	54,968.80	\$	81.38	\$	0.50	316
Total	7,727	\$	801,108.39		n/a		n/a	3,953
Average	644	\$	66,759.03	\$	93.60	\$	1.45	329
-	**Sche	dul	ed hours uniqu	ie fo	r calculating avera	ge	price reduction.	

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- Average price reduction calculation shown above reflects assumption that DADRP resource changes the marginal unit
- 2008 average price reduction for analysis period is \$0.43/MWh when DADRP unit does not change the marginal unit

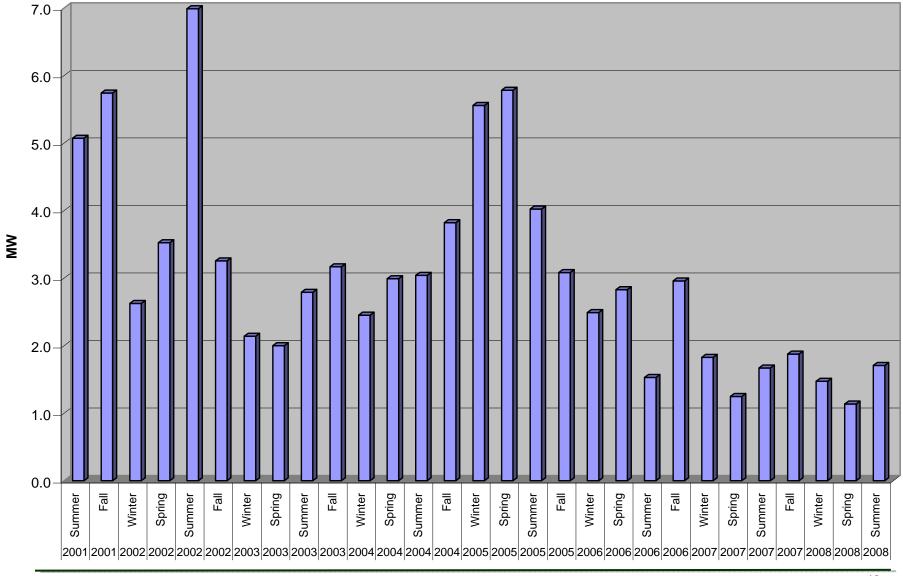


#### **DADRP Total MWh Scheduled by Season and Year**



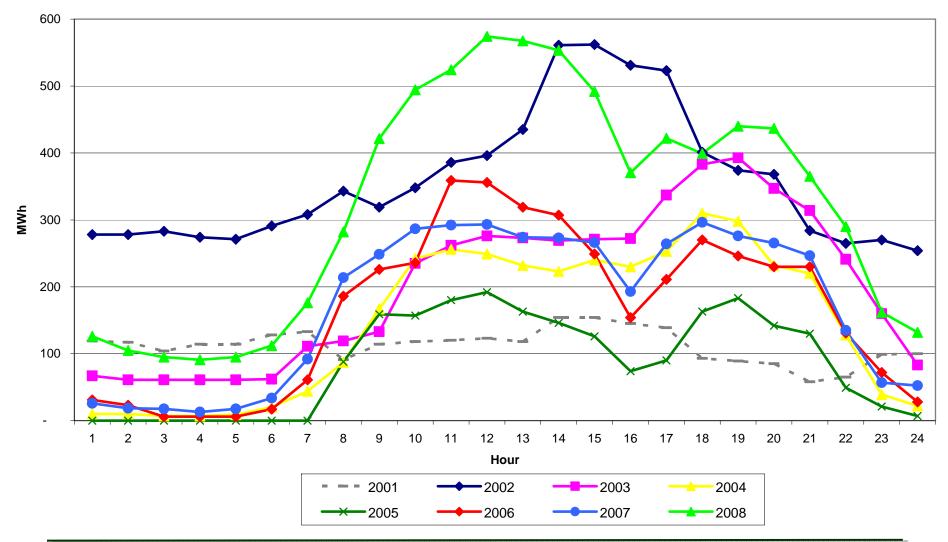
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# Total Scheduled DADRP Offers (MWh) by Hour and Program Year



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