

2010 Gold Book Forecast

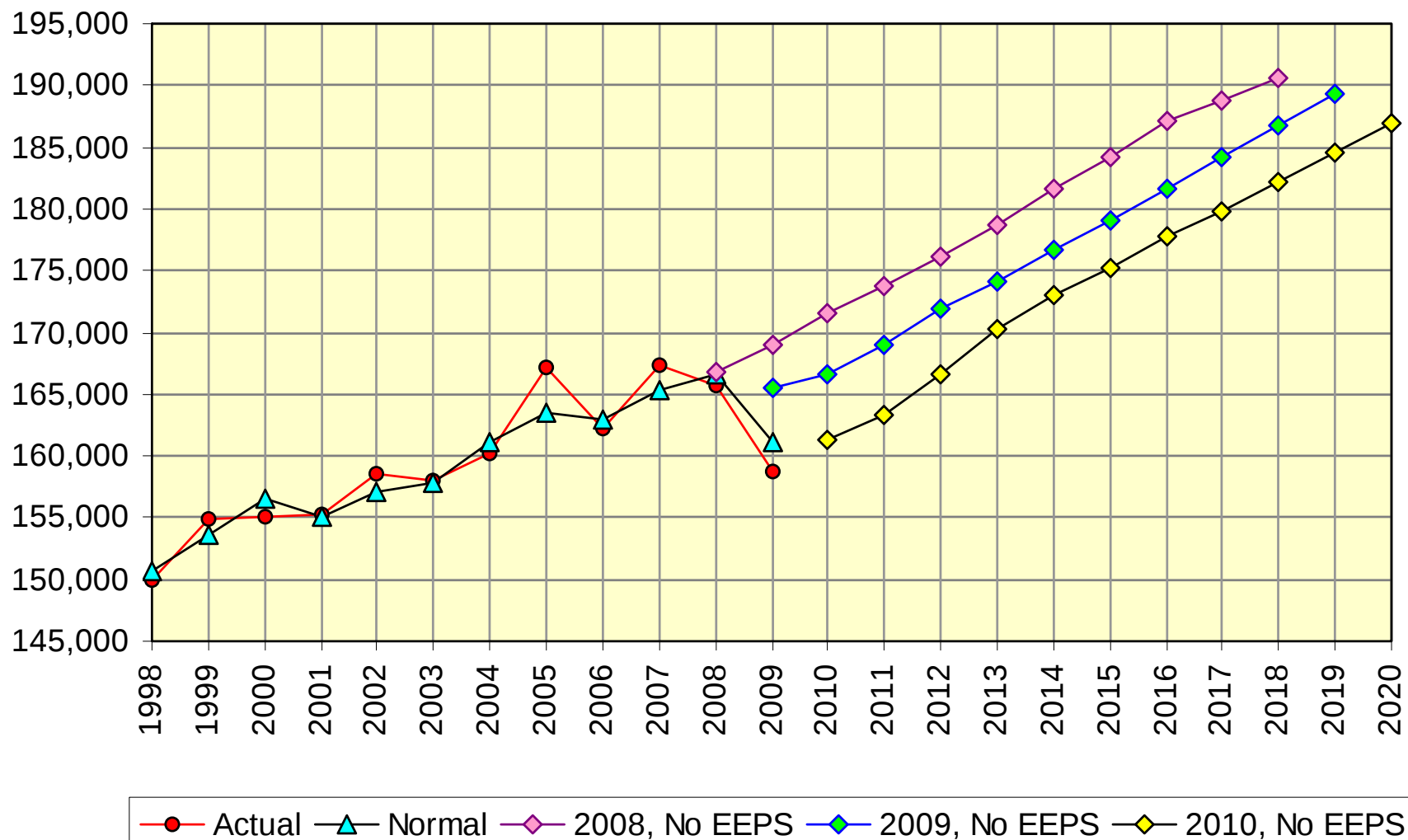
Final

ESPWG
March 5, 2010

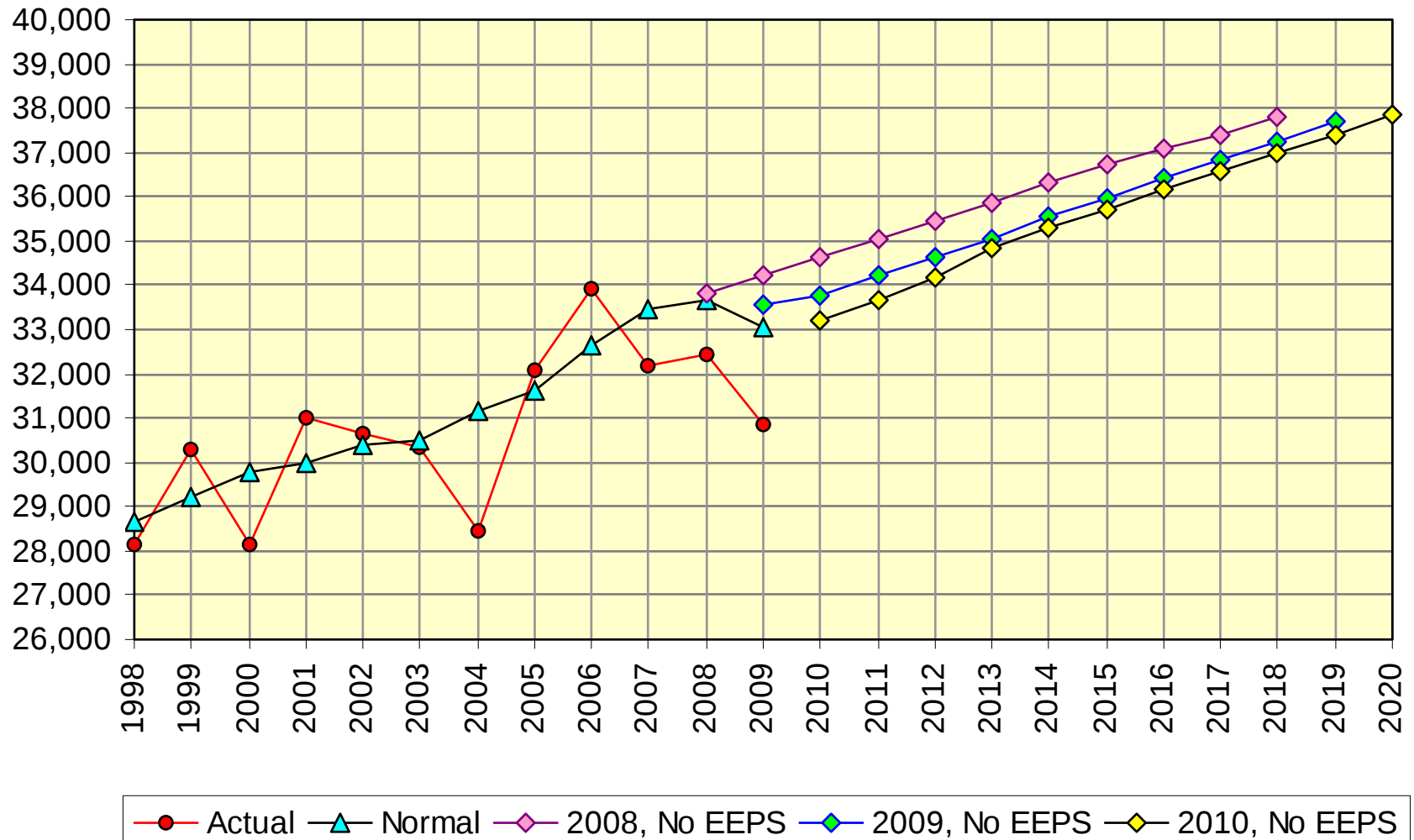
Arthur Maniaci
New York Independent System Operator

Econometric Forecasts

Actual Energy & Forecasts, 2008, 2009 & 2010 Econometric Forecast Without DSM - GWh



Actual Peak Demand & Forecasts, 2008, 2009 & 2010 Econometric Forecast Without DSM - Summer Peak MW



Energy Efficiency Impacts

Energy Efficiency Assumptions

- ◆ Assumes 90% realization rate on impacts
- ◆ Program spending & initial energy impacts consistent with DPS & TO projections
- ◆ 70% achievement rates for LIPA, NYPA, Utilities & new NYSERDA programs
 - *Reduction may be attributed to several factors: less than full participation and free-ridership among those who do*
- ◆ Lower rates of achievement for NYSERDA's SBC-3 programs and Building Codes & Standards, which to some extent are already included in econometric models

Summary of Statewide EE Impacts

2010 Statewide Energy Efficiency Projections - 2010 Gold Book

Year	LIPA	NYPA	Other State Agencies	NYSERDA - SBC 3	Utilities + T&D	Codes & Standards	EEPS - NYSERDA	EEPS - Utilities	Expected Annual GWh	Expected Cumulative GWh
2010	183	89	0	164	0	58	299	183	976	976
2011	146	118	0	204	23	238	705	450	1,884	2,860
2012	164	165	0	224	35	406	687	457	2,138	4,997
2013	175	220	0	137	58	322	513	343	1,768	6,765
2014	179	205	0	118	58	294	475	318	1,647	8,413
2015	188	187	0	95	58	258	428	287	1,501	9,914
2016	162	120	0	166	58	362	347	227	1,441	11,355
2017	125	60	0	166	58	362	126	76	972	12,327
2018	126	60	0	166	0	362	0	0	713	13,040
2019	113	60	0	166	0	0	0	0	339	13,379
2020	79	60	0	166	0	0	0	0	305	13,684
GWh	1,640	1,345	0	1,769	350	2,660	3,579	2,340	13,684	

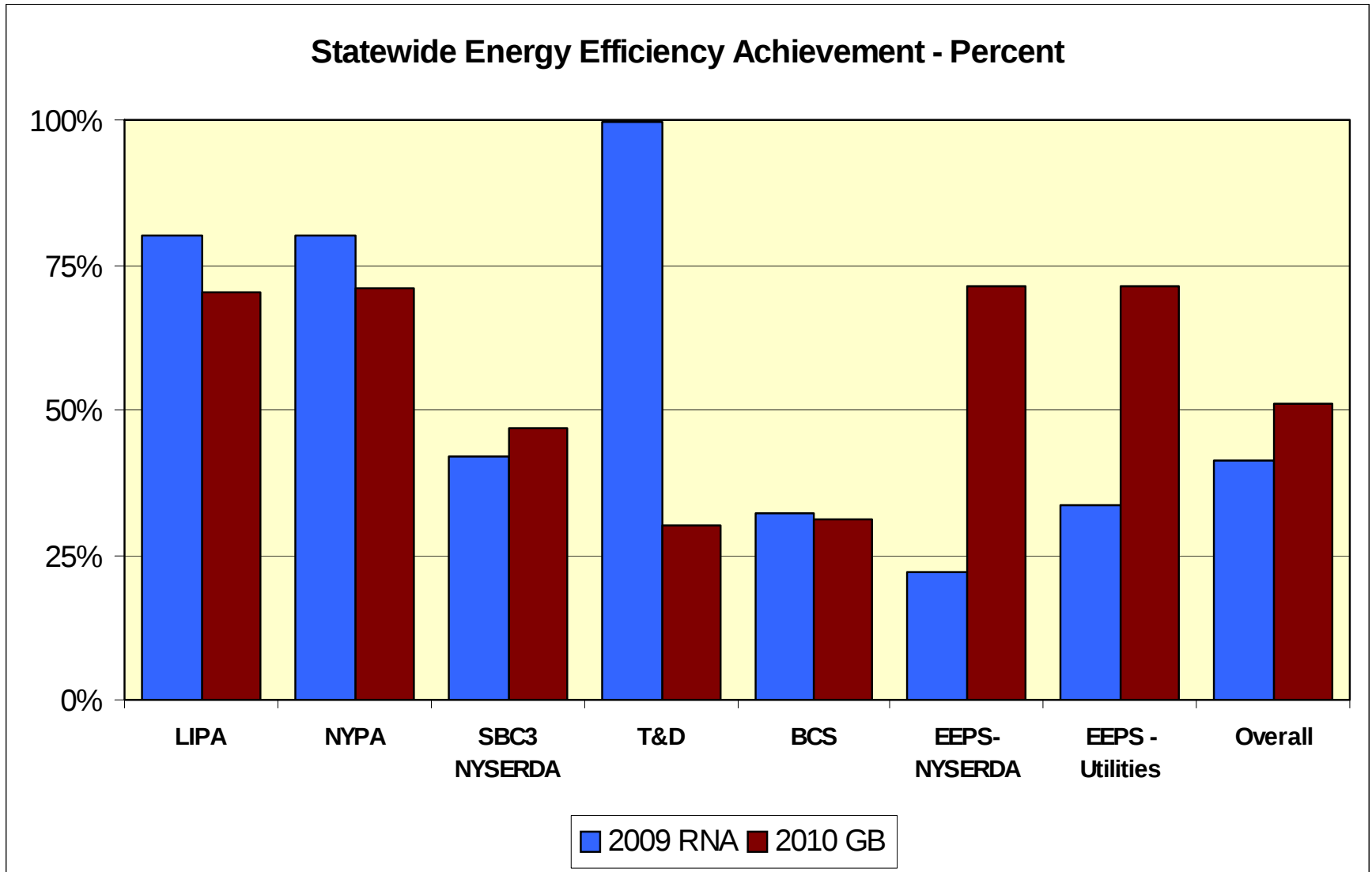
Goal	2,337	1,894	853	3,775	1,163	8,572	5,014	3,277	26,886	
Pct	70%	71%	0%	47%	30%	31%	71%	71%	51%	

Energy Impacts – 2009 RNA (August 2008)

2008 Statewide Energy Efficiency Projections - 2009 RNA

Year	LIPA	NYPA	Other State Agencies	NYSERDA - SBC 3	Utilities + T&D	Codes & Standards	EEPS - NYSERDA	EEPS - Utilities	Expected Annual GWh	Expected Annual GWh
2008	0	0	0	120	0	0	52	0	172	172
2009	94	36	0	120	41	0	210	240	741	913
2010	187	124	0	120	41	0	210	232	915	1,828
2011	187	240	0	120	41	0	210	208	1,007	2,835
2012	187	240	0	157	41	504	105	104	1,338	4,173
2013	187	240	0	157	41	504	105	104	1,338	5,511
2014	206	320	0	157	41	352	105	106	1,287	6,798
2015	206	320	0	157	43	352	105	106	1,288	8,086
2016	206	0	0	158	0	352	0	0	716	8,802
2017	206	0	0	158	0	352	0	0	716	9,519
2018	206	0	0	158	0	352	0	0	716	10,235
GWh	1,872	1,520	0	1,584	290	2,768	1,101	1,100	10,235	
Goal	2,337	1,894	853	3,775	1,163	8,572	5,014	3,277	26,886	
Pct	80%	80%	0%	42%	25%	32%	22%	34%	38%	

Comparison of Energy Impacts



Cumulative Energy Impacts by Zone - GWh

Cumulative Energy Impacts - 2010 Gold Book (GWh)

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2010	58	39	63	23	31	44	41	22	41	431	185	976
2011	188	125	203	73	99	142	132	69	130	1,346	354	2,860
2012	353	235	381	137	186	267	248	107	202	2,307	574	4,997
2013	539	358	581	209	284	407	378	132	251	2,807	820	6,765
2014	724	481	782	281	381	547	508	144	275	3,221	1,069	8,413
2015	909	605	982	353	479	687	638	155	297	3,482	1,327	9,914
2016	1,042	692	1,125	404	548	787	731	177	341	3,951	1,556	11,355
2017	1,127	749	1,217	438	594	851	791	191	368	4,255	1,745	12,327
2018	1,186	788	1,280	460	624	896	832	200	387	4,459	1,927	13,040
2019	1,210	805	1,307	470	637	914	850	205	396	4,544	2,042	13,379
2020	1,235	821	1,333	479	650	933	867	210	405	4,628	2,123	13,684

Peak Demand Impacts by Zone – MW

Cumulative Summer Peak Demand Impacts - 2010 Gold Book (MW)

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2010	9	7	10	3	5	8	8	3	8	75	36	174
2011	29	22	32	8	16	25	26	10	25	225	73	491
2012	51	40	57	14	28	45	46	15	38	370	119	825
2013	77	59	85	22	42	68	70	19	47	445	174	1,107
2014	104	80	115	29	57	91	94	20	51	510	238	1,388
2015	133	102	147	37	73	117	120	22	55	555	315	1,675
2016	153	118	169	43	84	135	138	25	64	635	389	1,954
2017	166	128	184	47	91	147	150	27	69	687	454	2,151
2018	175	135	194	49	96	154	158	29	72	722	526	2,311
2019	179	138	198	50	99	158	162	29	74	736	591	2,415
2020	183	141	203	51	101	162	166	30	75	750	647	2,510

2010 Gold Book Forecast

2010 Gold Book Forecast Annual Energy - GWh

Includes Impacts of Energy Efficiency Programs

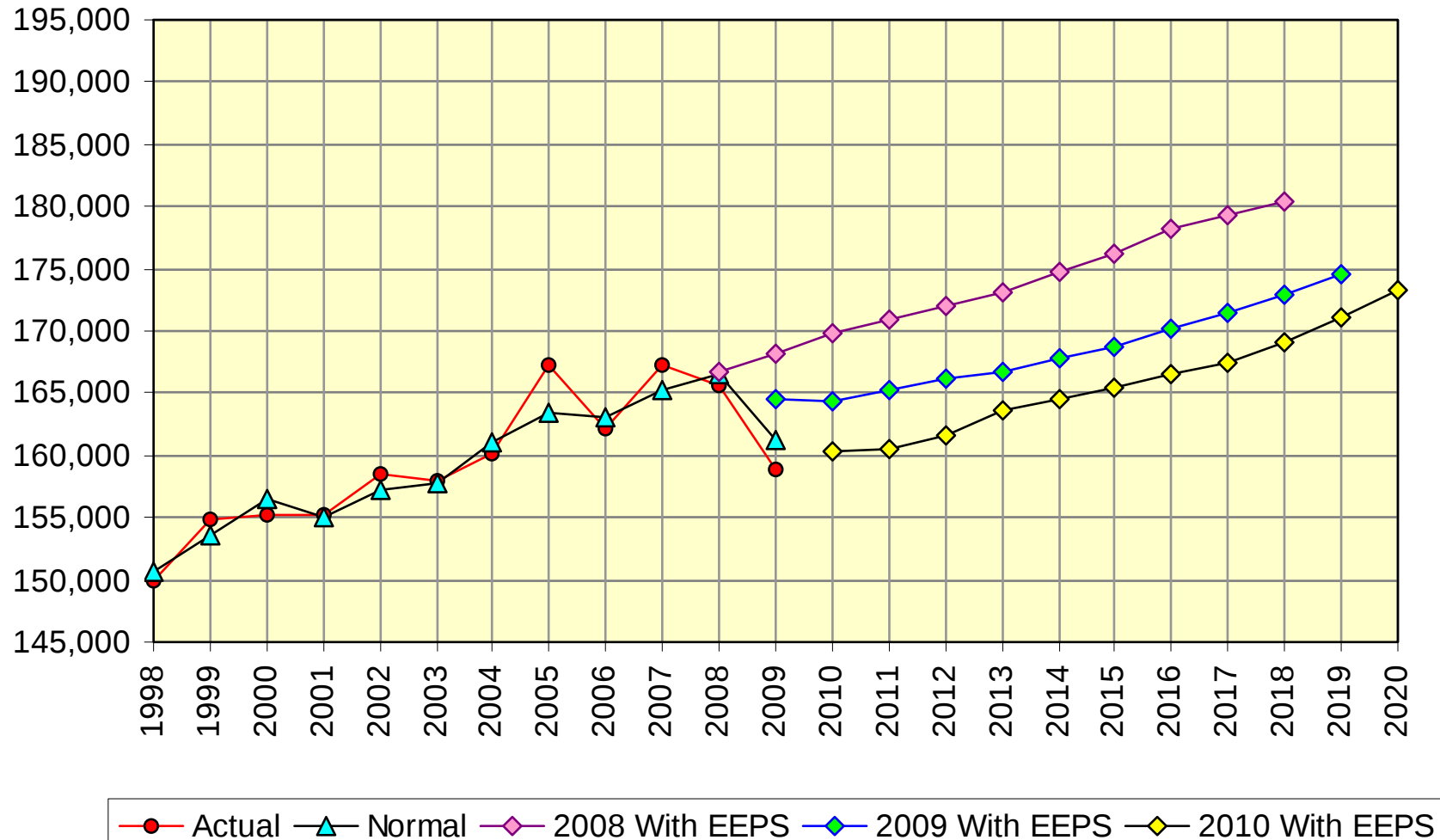
Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2010	15,364	9,990	16,245	4,236	8,011	11,383	10,448	2,997	5,857	53,639	22,187	160,358
2011	15,301	9,967	16,297	4,365	8,012	11,422	10,469	3,010	5,893	53,418	22,290	160,446
2012	15,211	9,972	16,343	4,920	7,989	11,436	10,554	2,992	5,939	53,801	22,461	161,618
2013	15,150	10,013	16,403	6,230	7,977	11,437	10,634	2,991	6,034	54,181	22,544	163,594
2014	15,194	10,058	16,429	6,358	7,959	11,439	10,669	3,037	6,193	54,595	22,623	164,556
2015	15,189	10,068	16,462	6,385	7,945	11,443	10,707	3,083	6,319	55,003	22,767	165,372
2016	15,202	10,103	16,494	6,397	7,970	11,464	10,754	3,131	6,440	55,396	23,122	166,472
2017	15,263	10,174	16,578	6,431	8,021	11,522	10,830	3,165	6,520	55,675	23,340	167,517
2018	15,352	10,262	16,692	6,489	8,084	11,601	10,952	3,216	6,628	56,210	23,646	169,132
2019	15,476	10,377	16,846	6,559	8,167	11,708	11,119	3,271	6,752	56,856	24,031	171,161
2020	15,602	10,494	17,001	6,625	8,249	11,815	11,289	3,332	6,886	57,503	24,535	173,332

2010 Gold Book Forecast Summer Peak Demand - MW

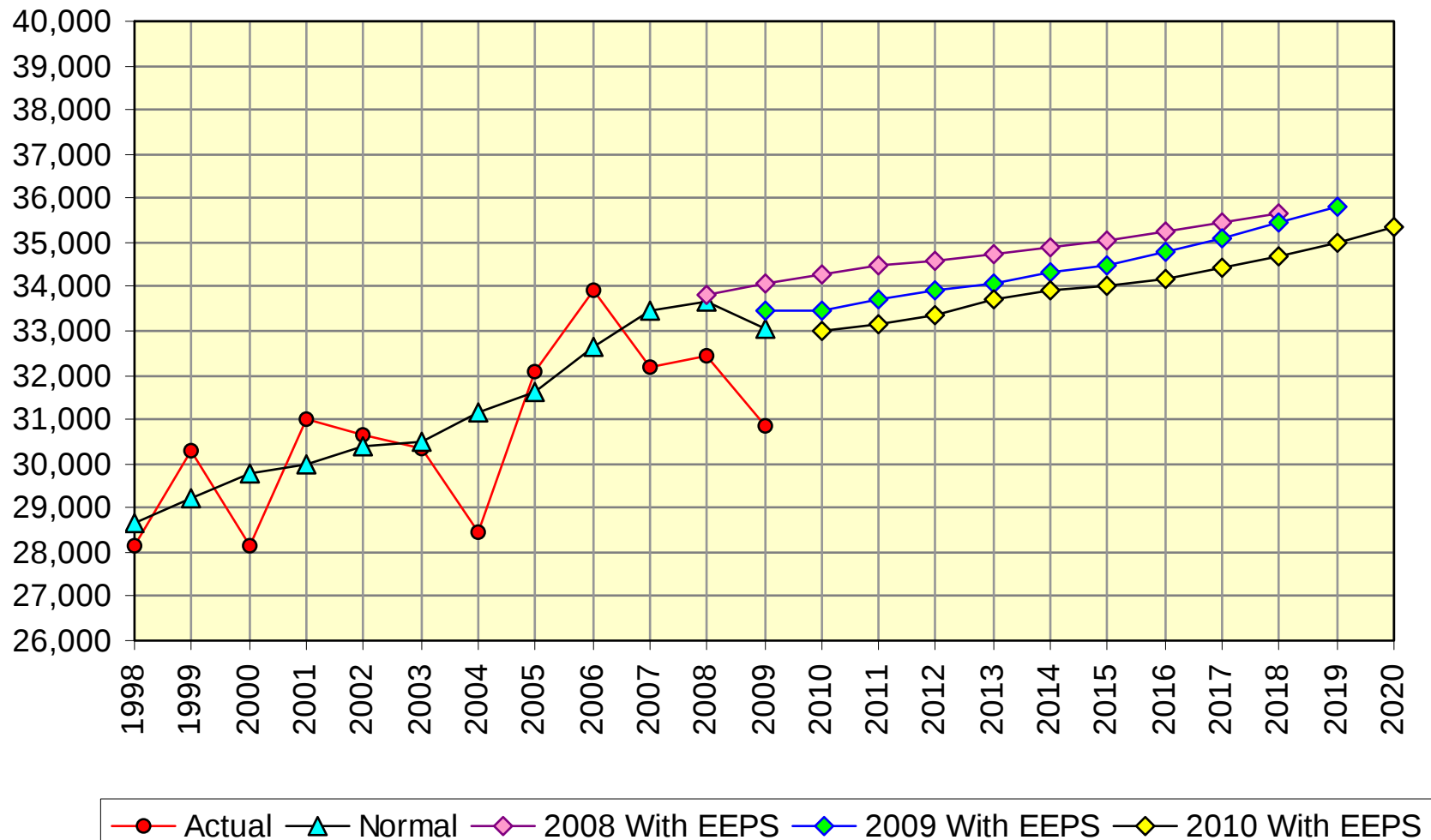
Includes Impacts of Energy Efficiency Programs

Year	A	B	C	D	E	F	G	H	I	J	K	NYCA
2010	2,609	1,969	2,829	520	1,423	2,260	2,288	623	1,494	11,725	5,286	33,025
2011	2,605	1,970	2,844	537	1,426	2,274	2,297	624	1,494	11,775	5,314	33,160
2012	2,595	1,975	2,858	607	1,425	2,282	2,321	627	1,503	11,815	5,360	33,367
2013	2,591	1,988	2,875	768	1,427	2,287	2,344	633	1,515	11,925	5,383	33,737
2014	2,603	2,001	2,885	786	1,426	2,292	2,356	635	1,519	11,995	5,398	33,897
2015	2,604	2,005	2,894	790	1,425	2,294	2,367	636	1,524	12,065	5,417	34,021
2016	2,609	2,013	2,902	792	1,431	2,301	2,379	638	1,528	12,120	5,481	34,193
2017	2,621	2,028	2,918	796	1,440	2,313	2,397	640	1,531	12,218	5,513	34,414
2018	2,637	2,046	2,939	804	1,452	2,331	2,425	644	1,540	12,298	5,557	34,672
2019	2,658	2,069	2,966	813	1,466	2,351	2,461	645	1,543	12,404	5,611	34,986
2020	2,680	2,093	2,993	821	1,481	2,372	2,498	646	1,546	12,510	5,695	35,334

Actual Energy & Forecasts, 2008, 2009 & 2010 Base Case Including DSM - GWh



Actual Peak Demand & Forecasts, 2008, 2009 & 2010 Base Case Including DSM - Summer Peak MW



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for state's bulk electricity system.

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