

Current Summary of Energy Usage & Peak Demand

Arthur Maniaci

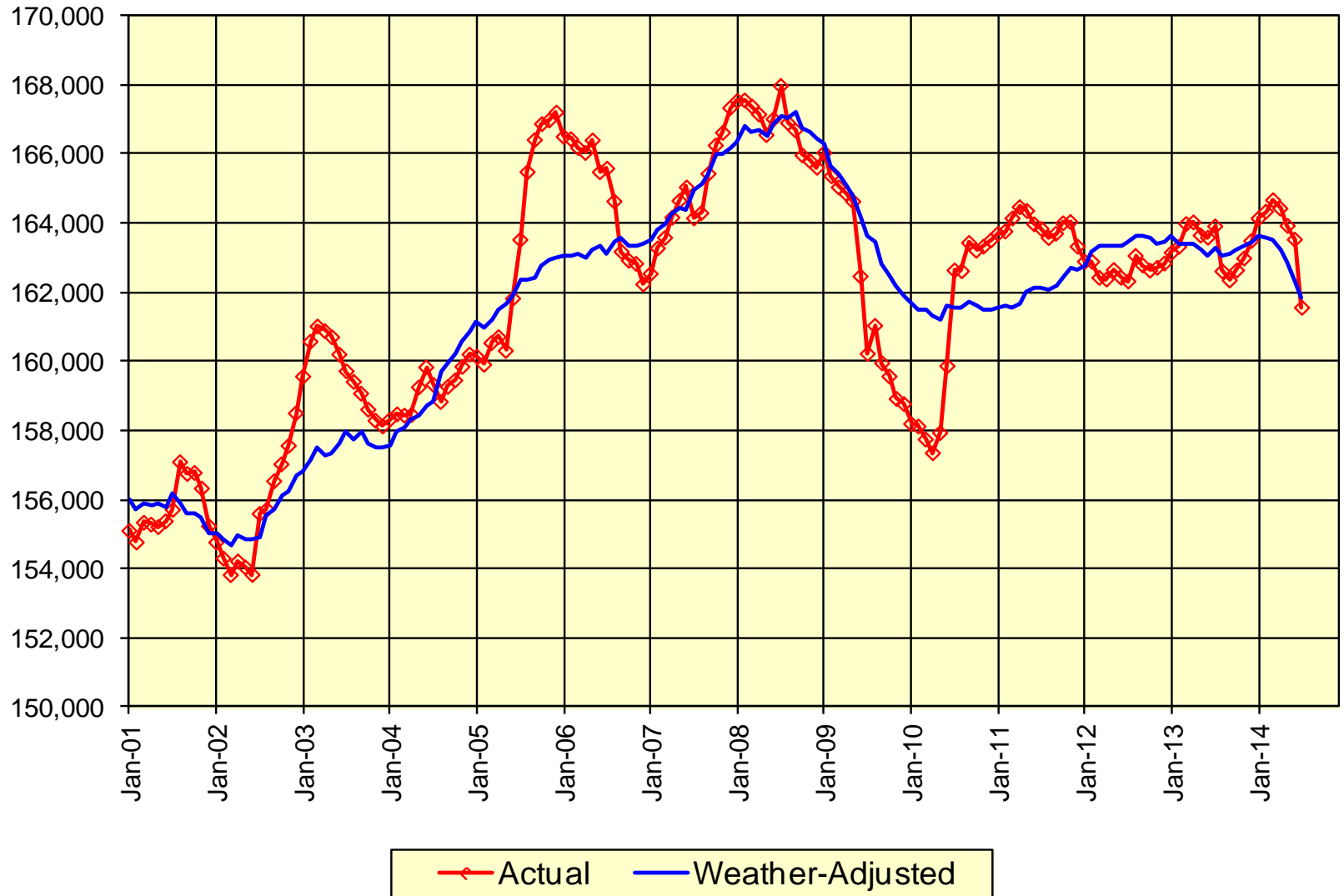
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New York Independent System Operator*

Load Forecasting Task Force

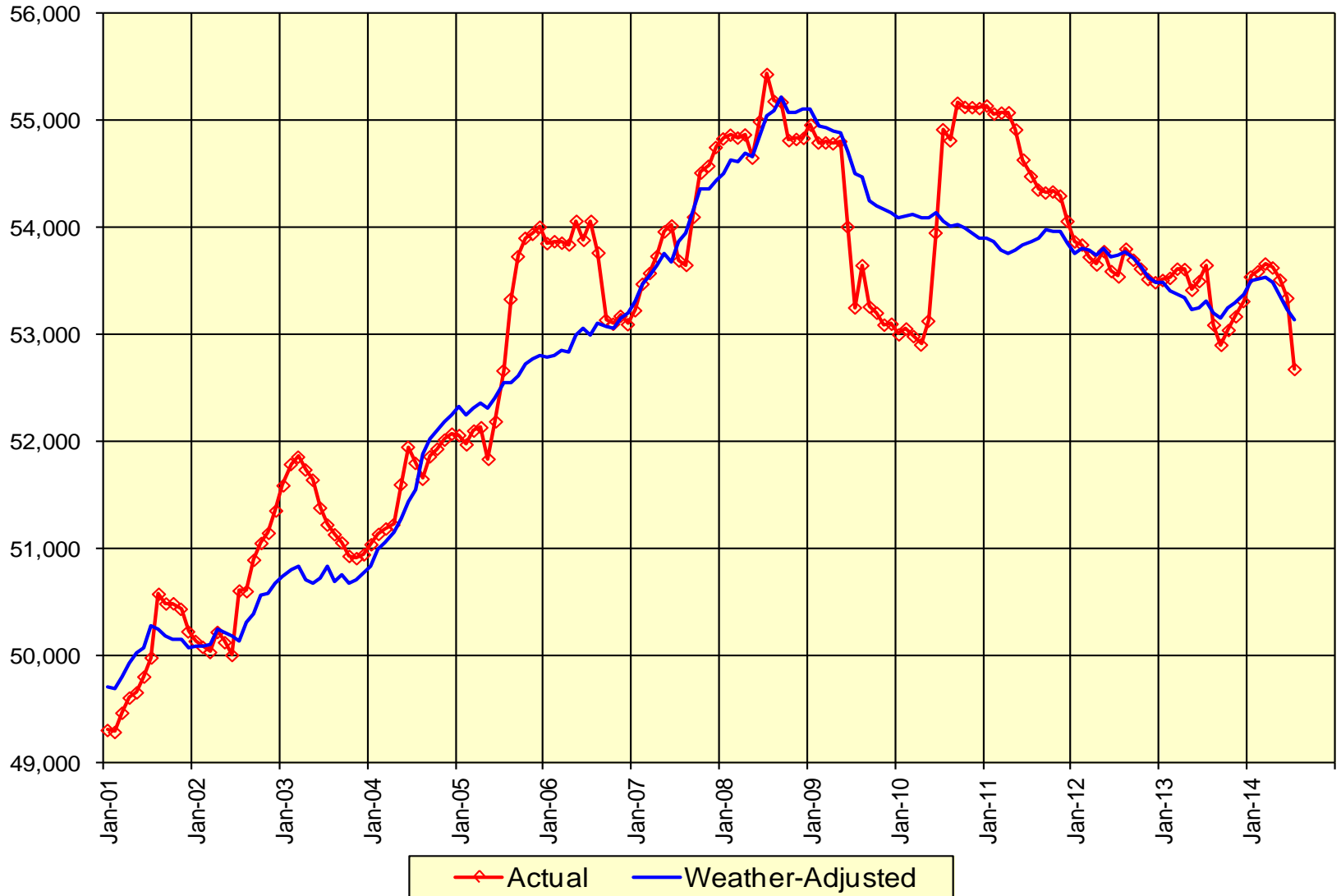
August 25, 2014

Rensselaer, NY

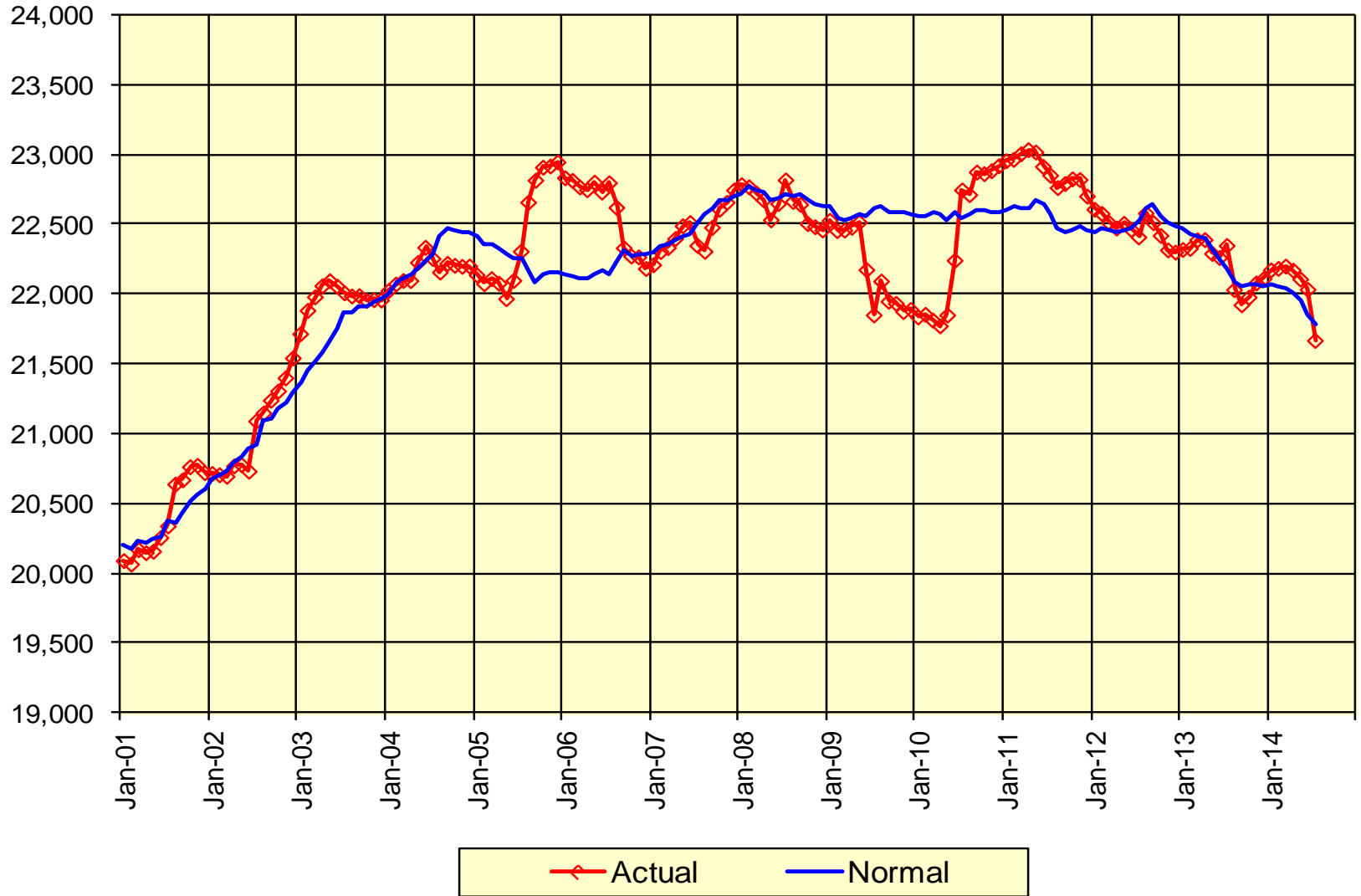
NYCA Actual and Weather-Adjusted Sendout - 2001 to Present 12 Month Moving Sum - GWh



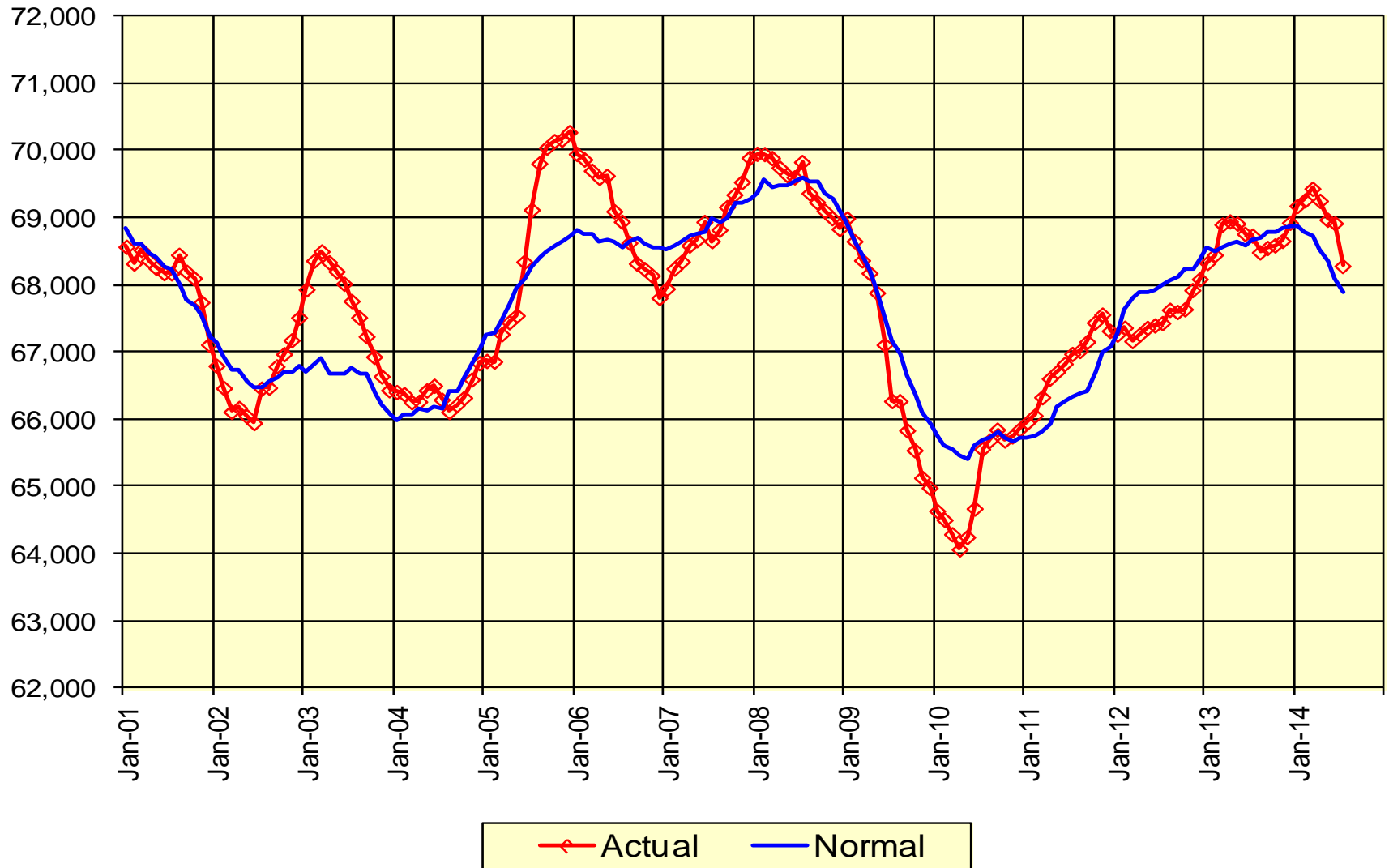
Zone J Weather Normalization - 2001 to Present 12 Month Moving Sum - GWh



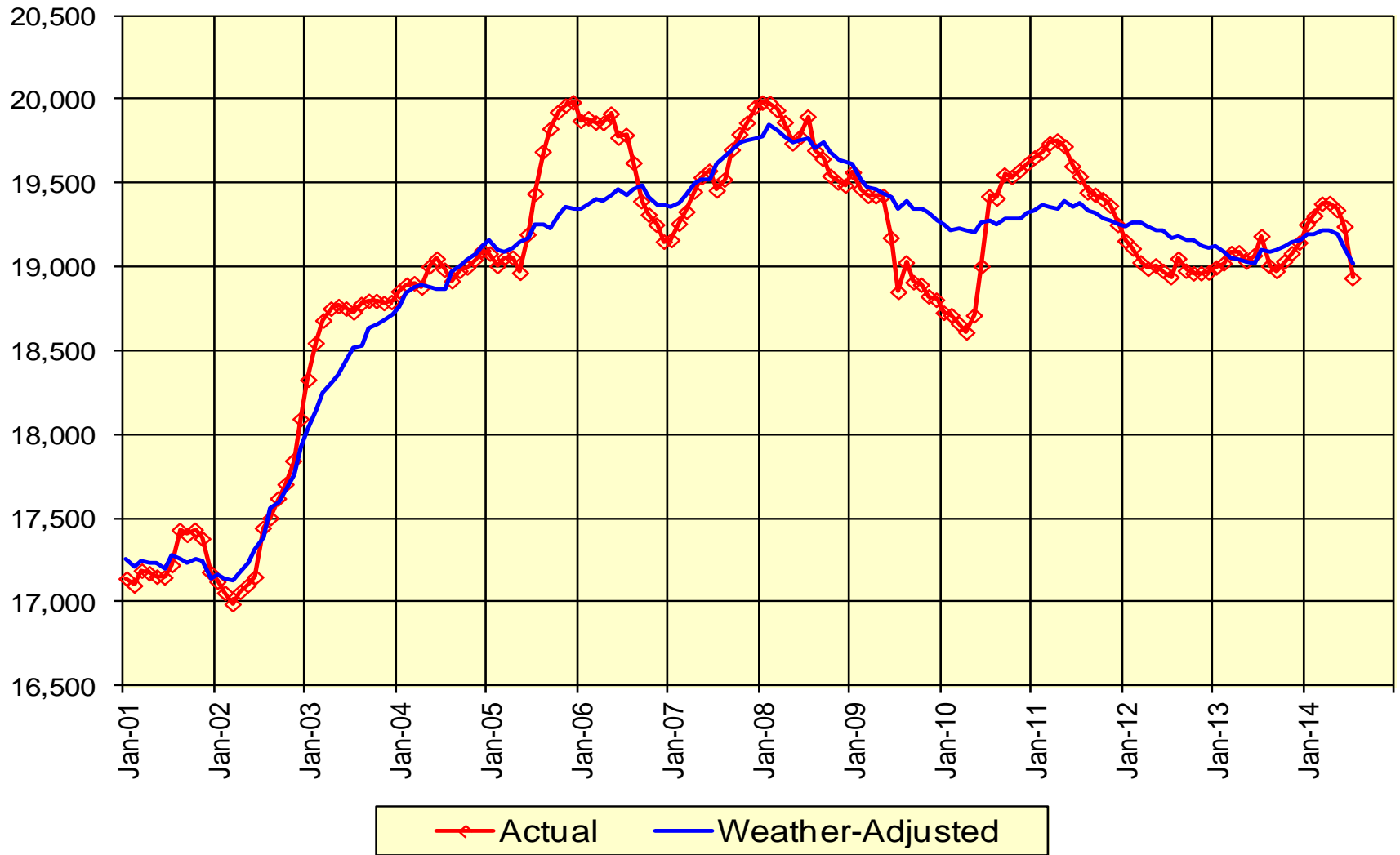
Zone K Weather Normalization - 2001 to Present 12 Month Moving Sum - GWh



Upstate A-F Weather Normalization - 2001 to Present 12 Month Moving Sum - GWh

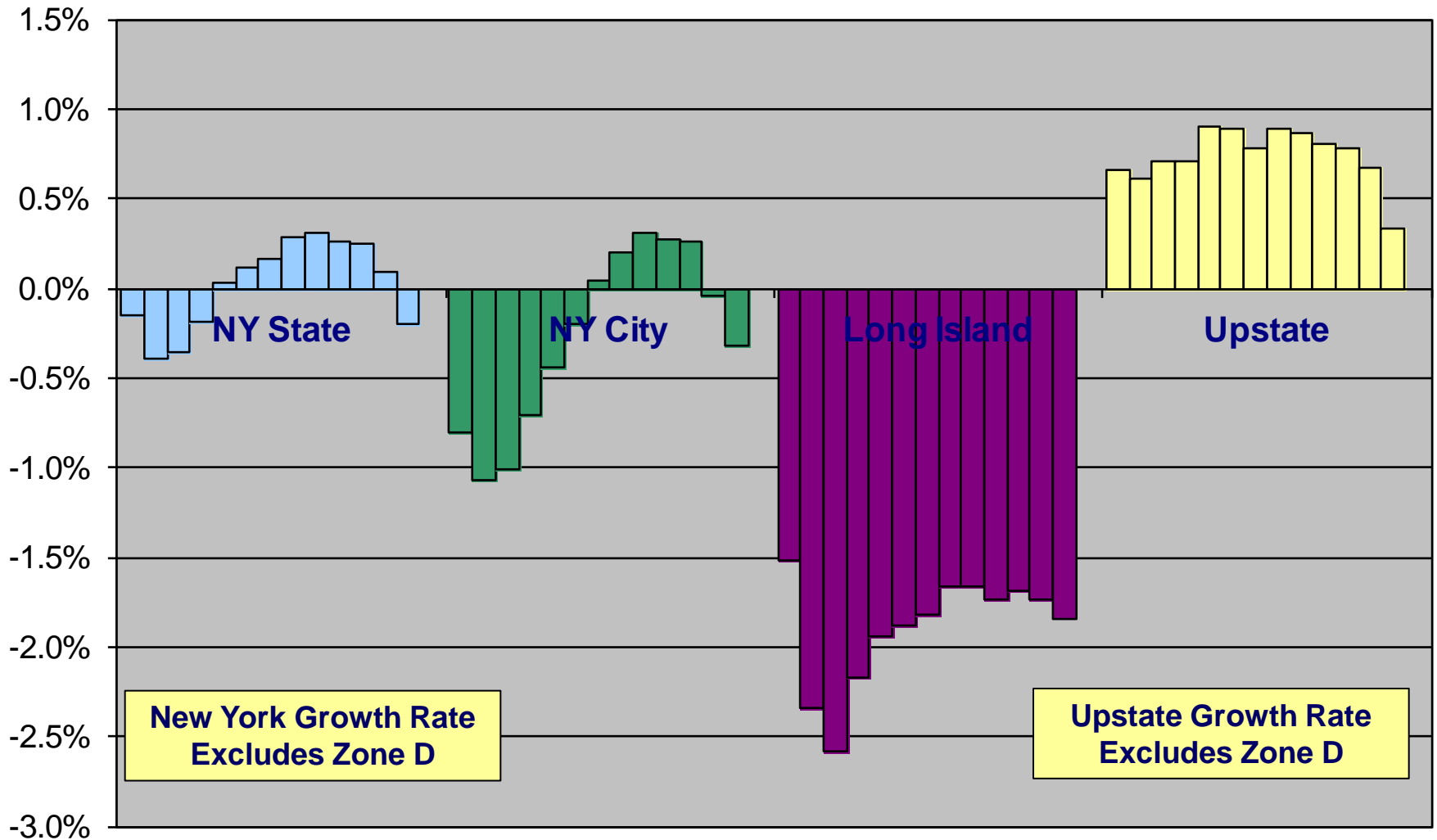


Zones G, H & I Weather Normalization - 2001 to Present 12 Month Moving Sum - GWh



NYCA Sendout - 12-Month Moving Average Annual Growth Rate

Weather Normalized Growth, Jul-2013 to Jul-2014



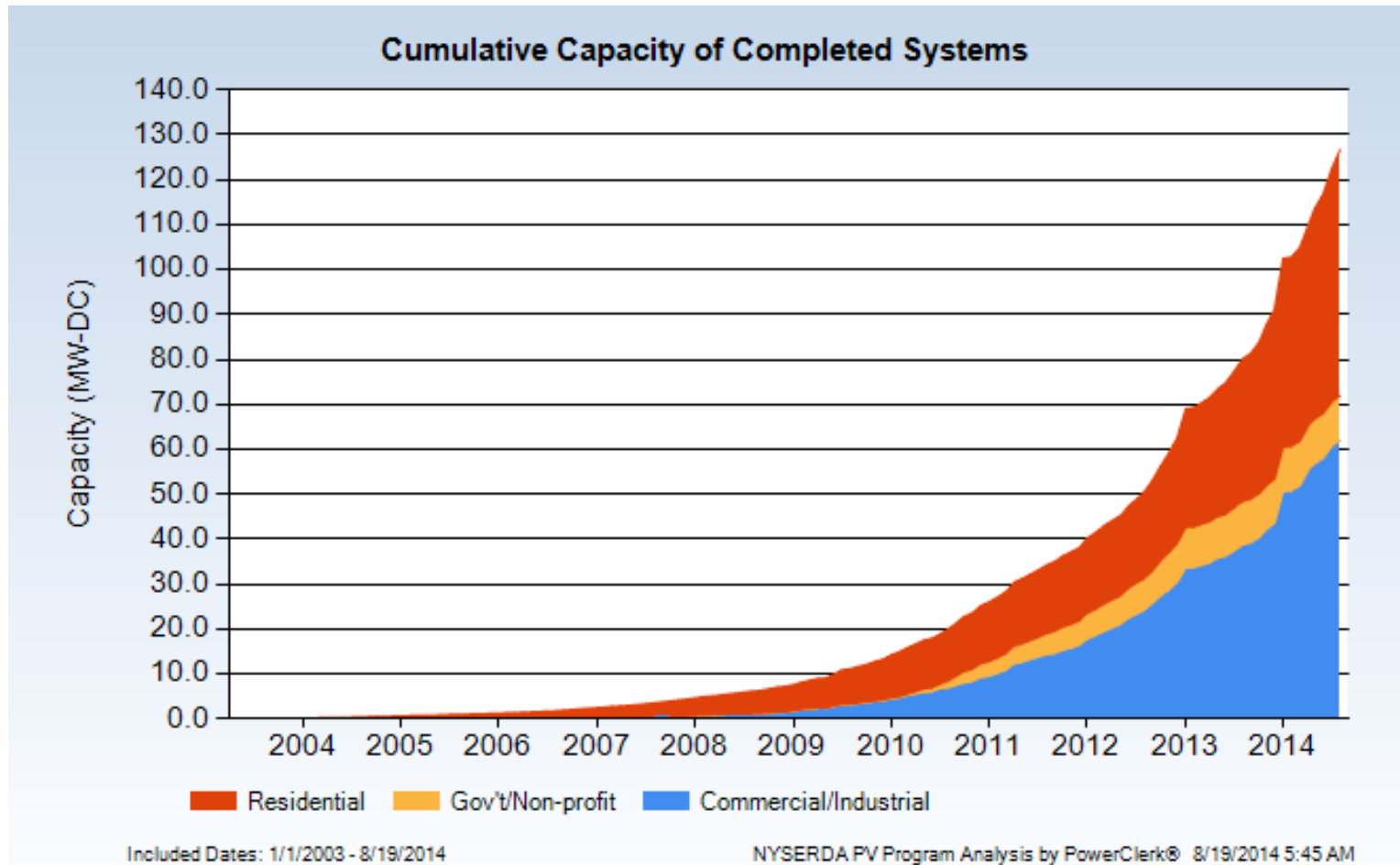
Current Installed Capacity of Customer-Sited Solar PV - MW as of August 2014

(a)	(b)	(c)	(d)	(e)=(d/c)	(f)=(d _i /Sd _i)	(g)	(h)=(d/g)
Zone	Metro Area	Number of Solar PV Systems	Total MW, DC	Avg kW, DC	Pct of Solar PV MW in Zone	2013 Peak MW	Pct of SPV MW as Share of 2013
A	Buffalo	839	15.4	18.4	6.7%	2,549	0.6%
B	Rochester	539	4.8	8.8	2.1%	2,030	0.2%
C	Syracuse	701	16.4	23.5	7.1%	2,921	0.6%
D	Plattsburg	88	0.9	10.4	0.4%	819	0.1%
E	Utica	1,259	7.7	6.2	3.4%	1,540	0.5%
F	Albany	2,173	43.2	19.9	18.7%	2,392	1.8%
G	Poughkeepsie	2,634	30.2	11.5	13.1%	2,358	1.3%
H	Westchester	322	4.3	13.4	1.9%	721	0.6%
I	Westchester	549	7.3	13.3	3.2%	1,517	0.5%
J	New York City	1,345	31.2	23.2	13.5%	11,456	0.3%
K	Long Island	8,687	68.9	7.9	29.9%	5,653	1.2%
	Total	19,136	230.3	12.0	100.0%	33,956	0.7%

(1) Data includes NYSEERDA customer-sited programs for small SPV (<= 200 kW) , large SPV (>200 kW) and LIPA's customer-sited programs.

(2) Solar PV capacity is reported in DC power. Inverter losses to convert DC to AC are not included.

Cumulative Installed Capacity of Customer-Sited Solar PV – MW Systems of 200 kW & Under, Zones A to J



Source: <http://nyserda.powerclerkreports.com/Default.aspx?ReportId=6>

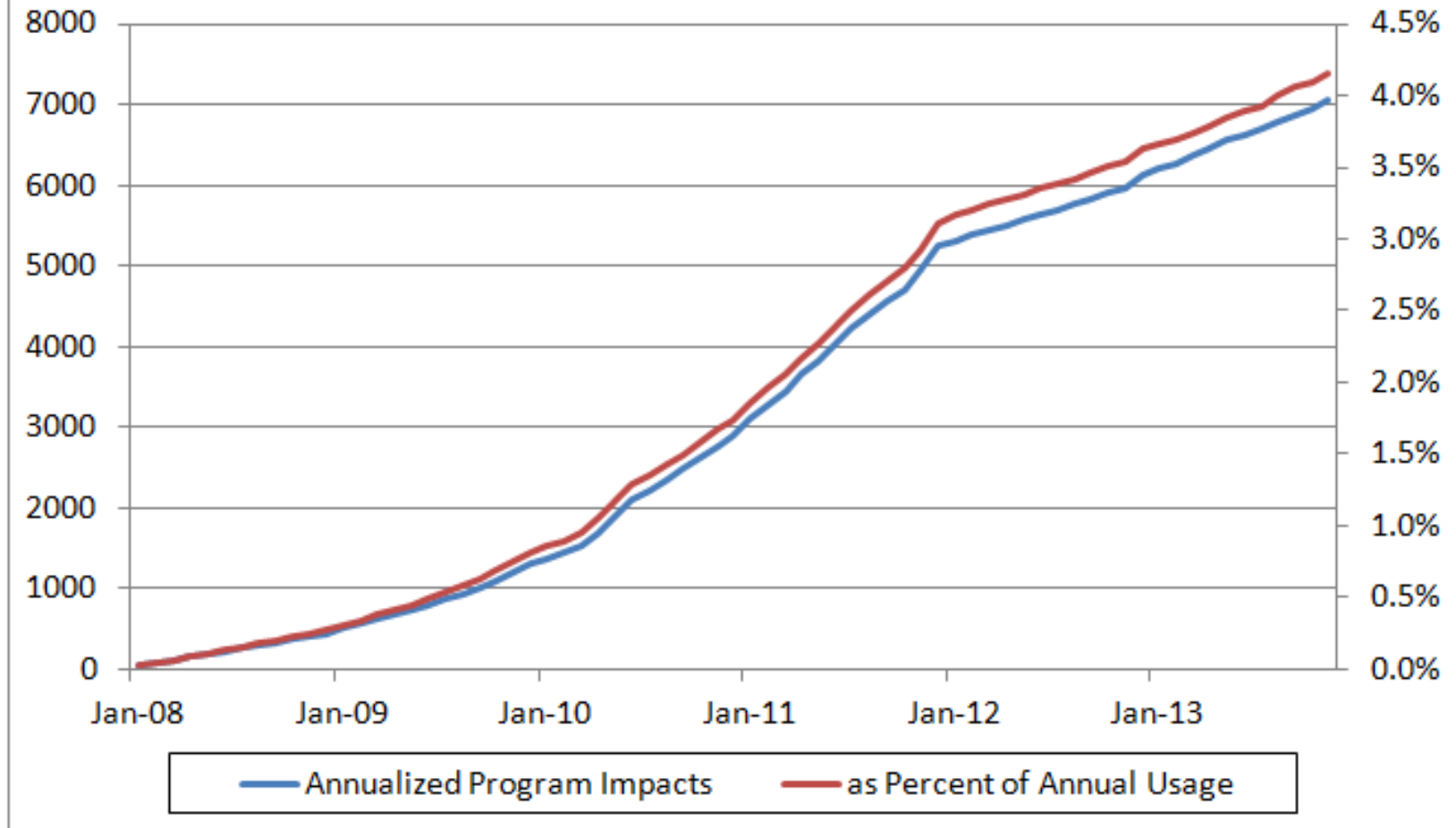
Note: Cumulative capacity is in DC. Inverter losses to convert DC to AC are not included.

Cumulative Capacity of Distributed Generation – MW as of August 2014

Zone	Anaerobic Digesters	Combined Heat & Power	Total MW
A	2.9	5.9	8.8
B	0.7	2.2	2.9
C	2.2	30.8	33.0
D	0.1	0.0	0.1
E	0.9	9.8	10.7
F	0.3	7.5	7.8
G	0.0	0.3	0.3
H	0.0	0.4	0.4
I	0.0	0.7	0.7
J	0.0	63.5	63.5
K	0.0	3.3	3.3
Total	7.1	124.4	131.5

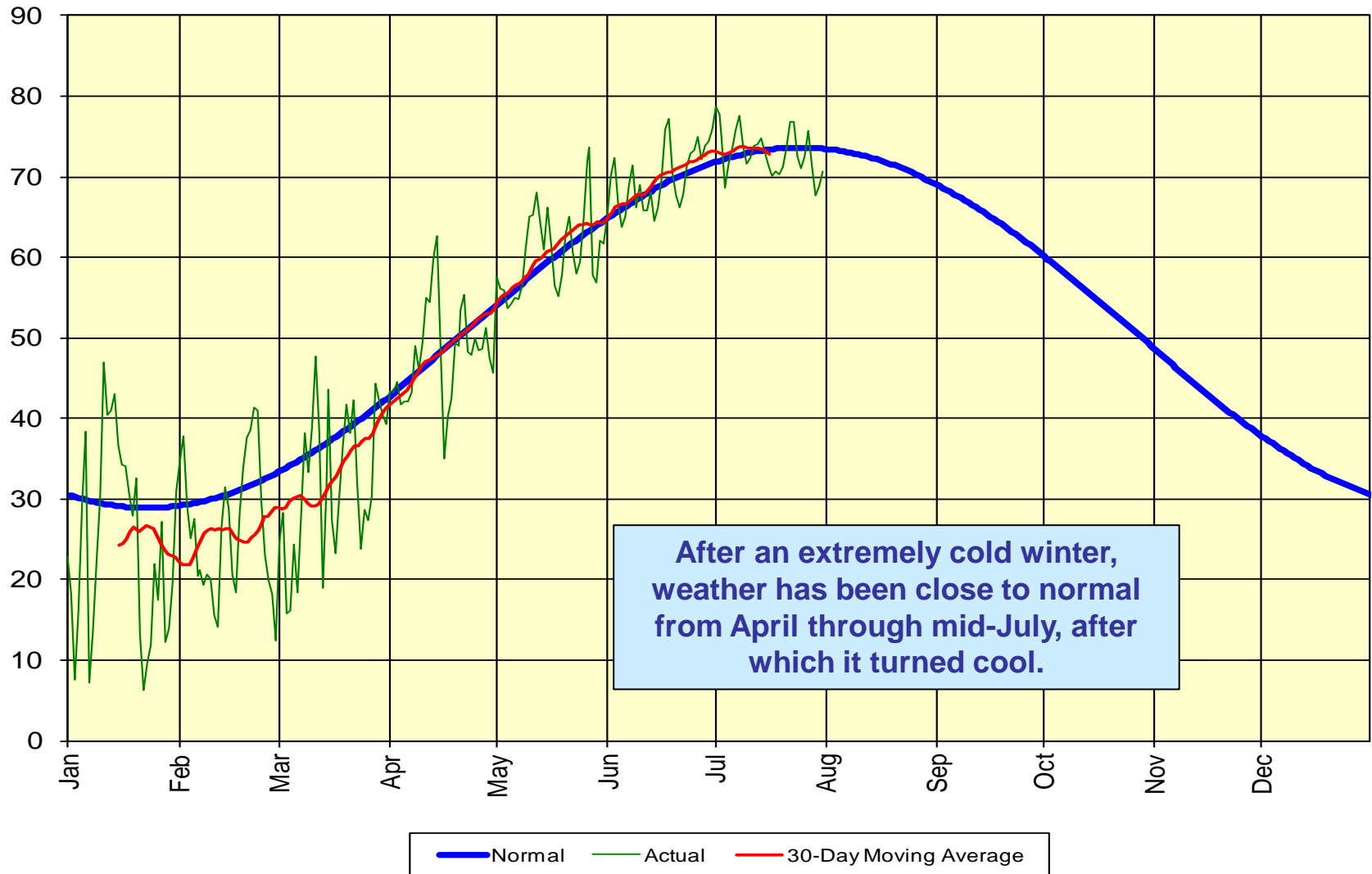
Data from NYSERDA

Statewide Energy Efficiency Impacts - GWh 2008 to 2013

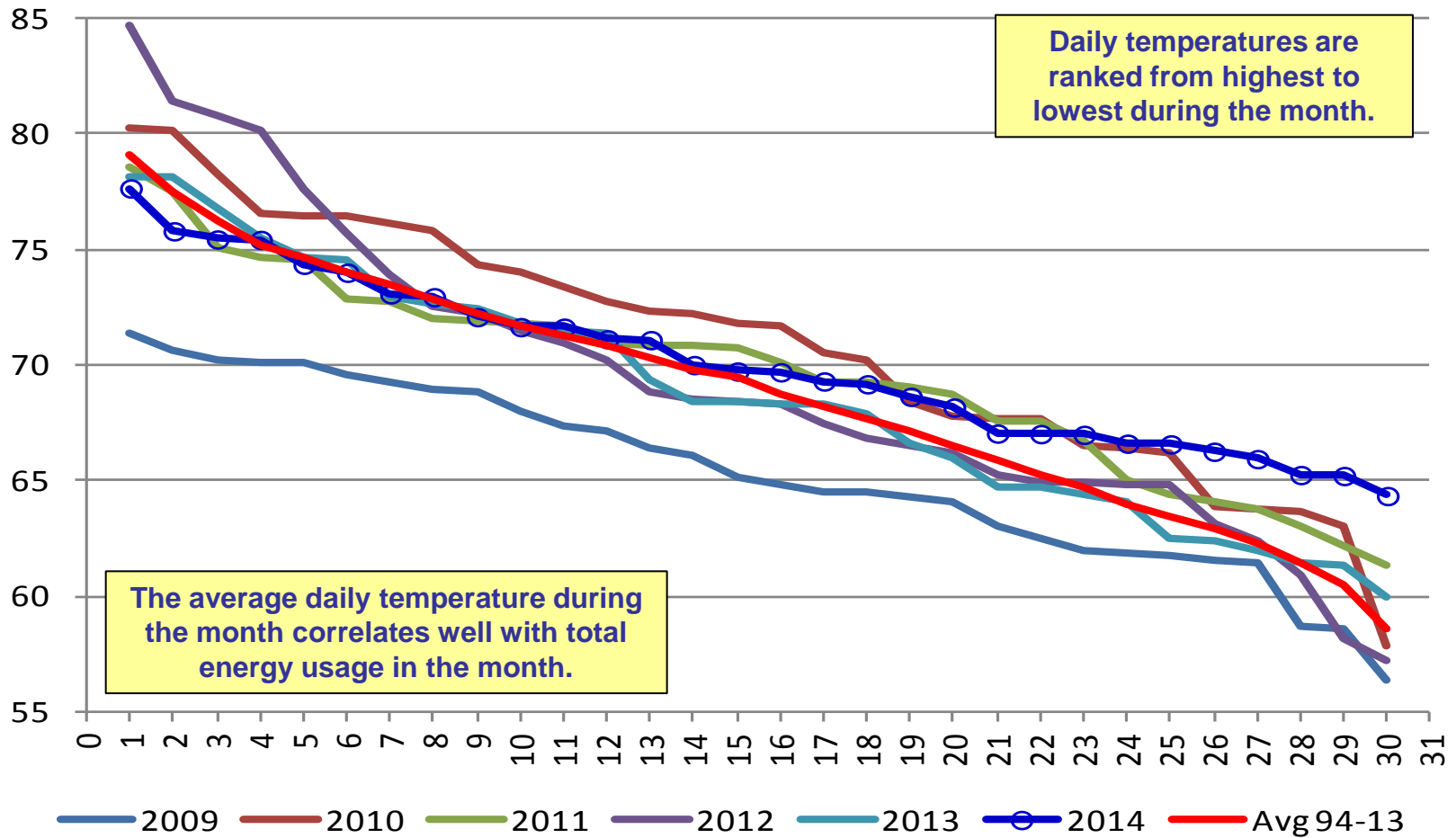


Includes annualized energy impacts for NYSERDA, NYPA, LIPA and all NY IOUs. NYSERDA and IOU data from DPS 'scorecard' reports; NYPA and LIPA data as reported to the NYISO. Energy impact results are based on EEPS Technical Manual or other program impact estimates.

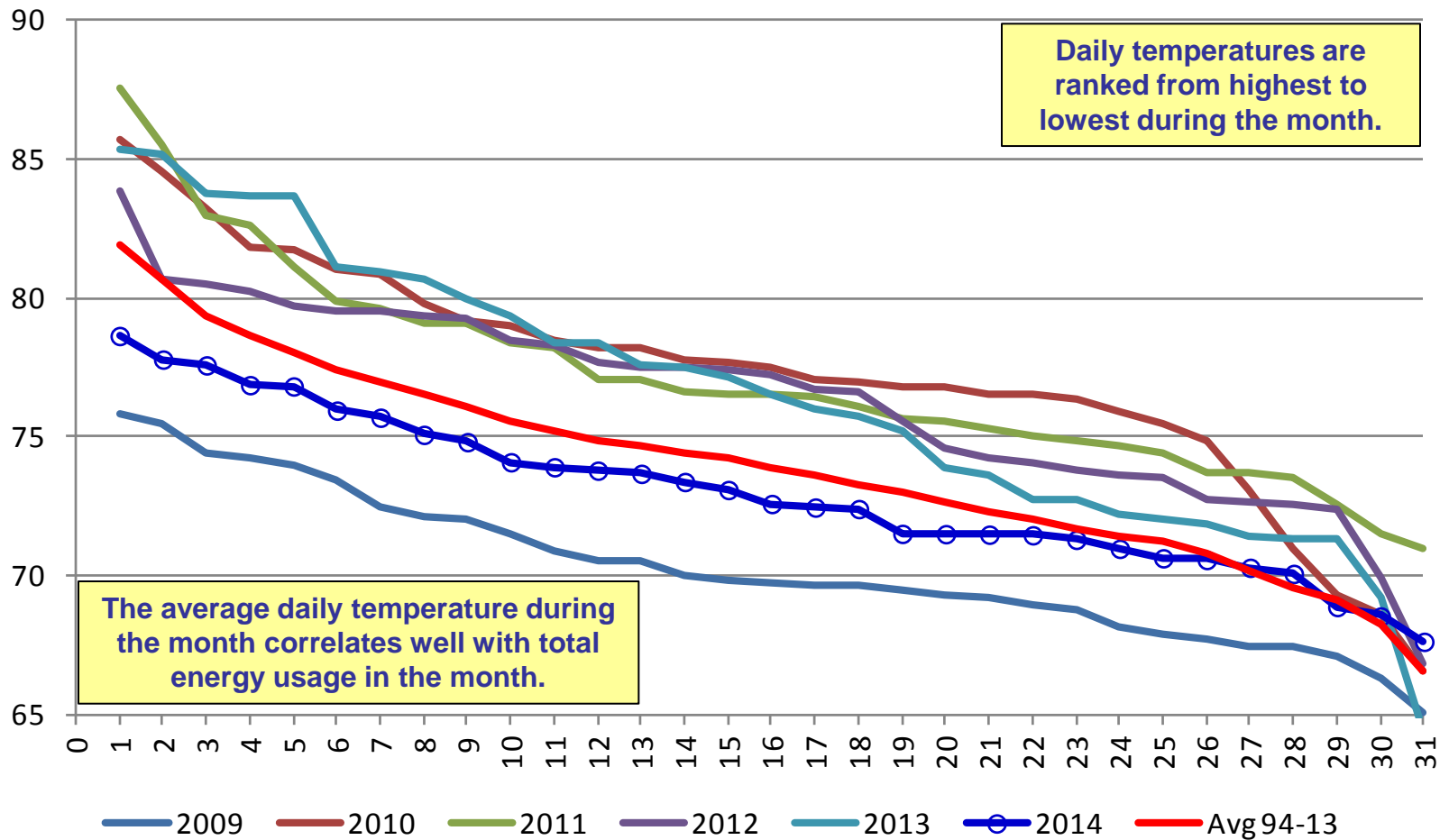
Average Daily Temperature - Normal vs 2014
 NYCA System-Wide Temperature



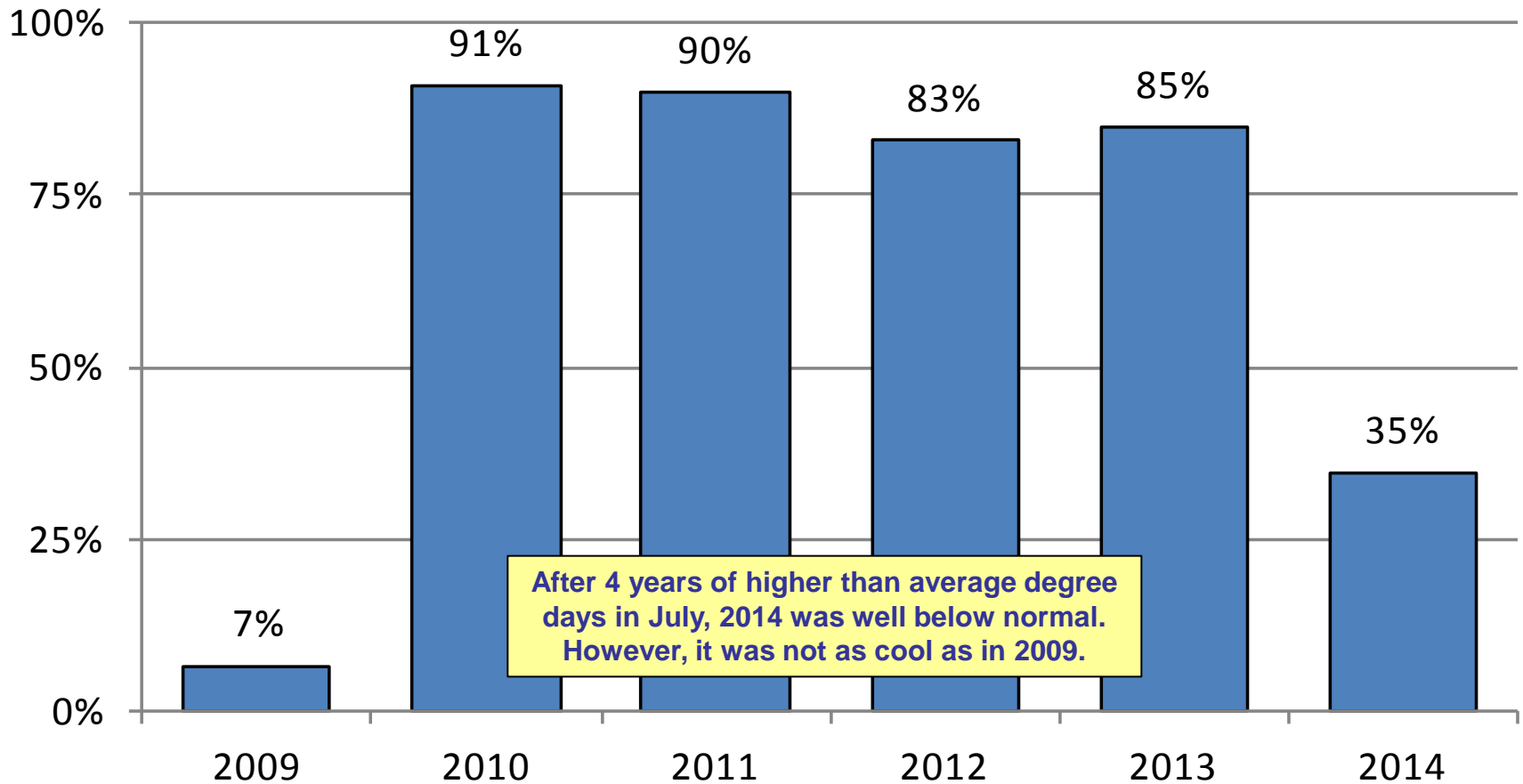
Avg Temp - Ranked Daily Normals, June NYCA



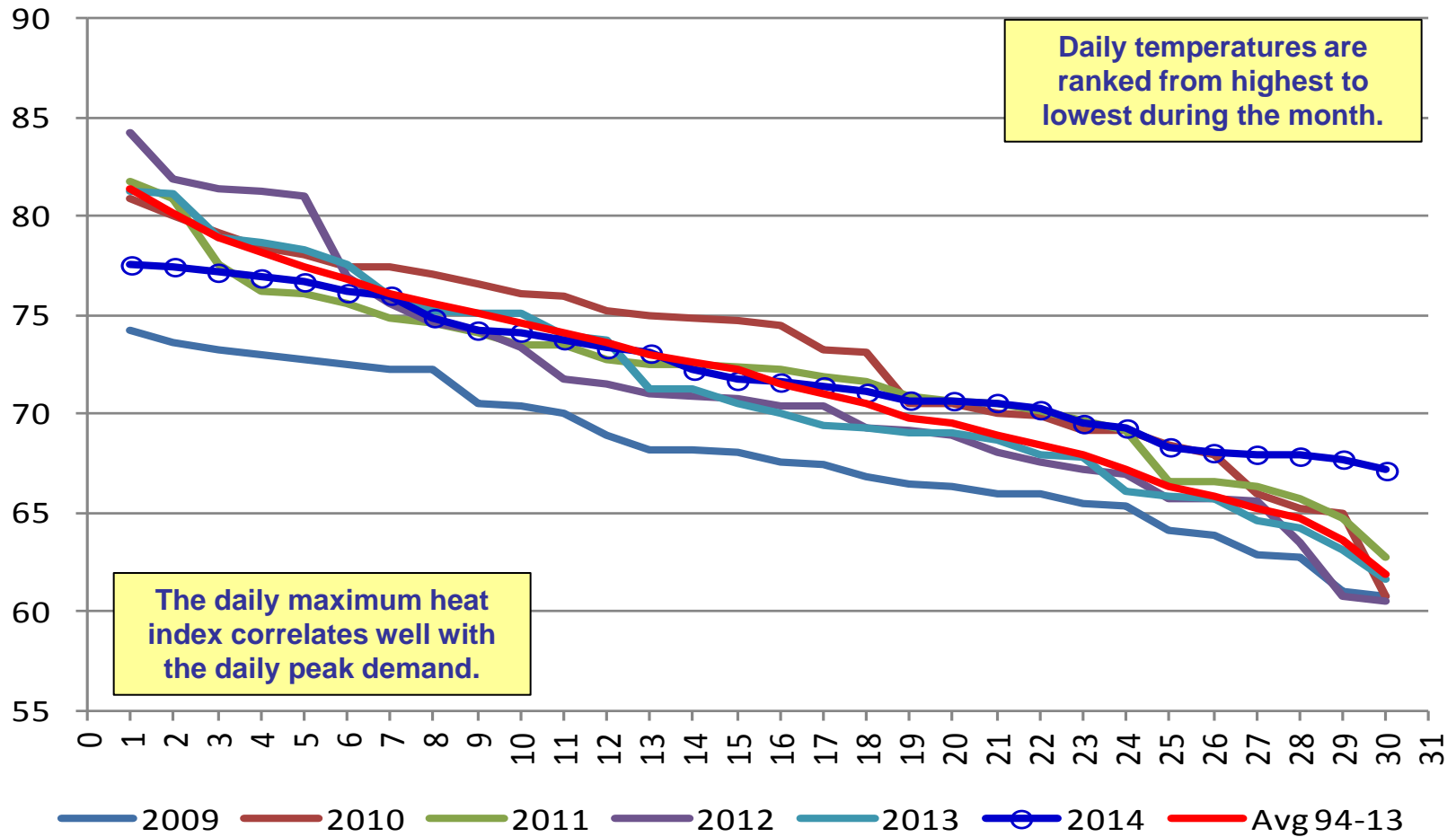
Avg Temp - Ranked Daily Normals, July NYCA



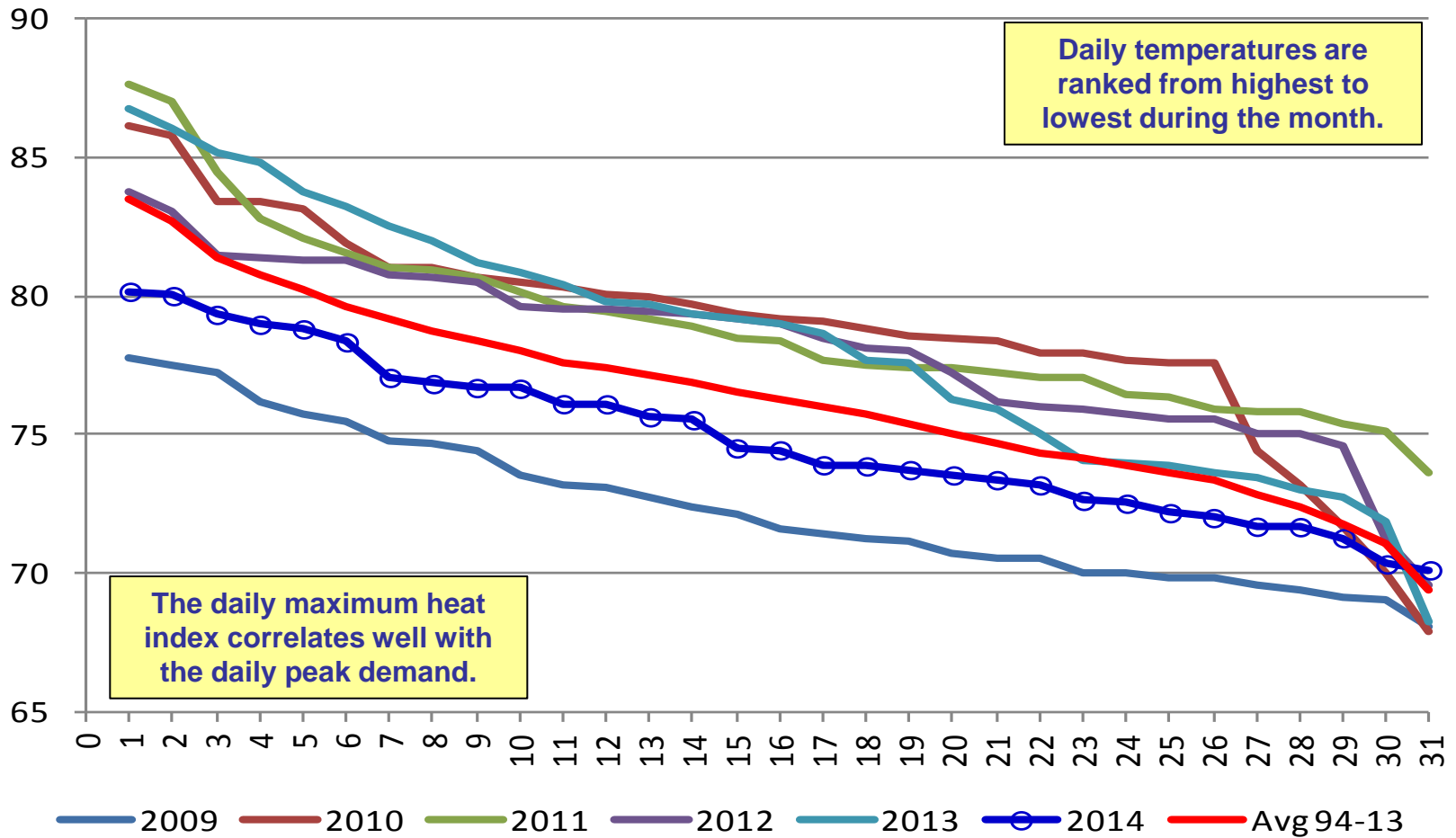
July Degree-Day Percentiles 2009 - 2014



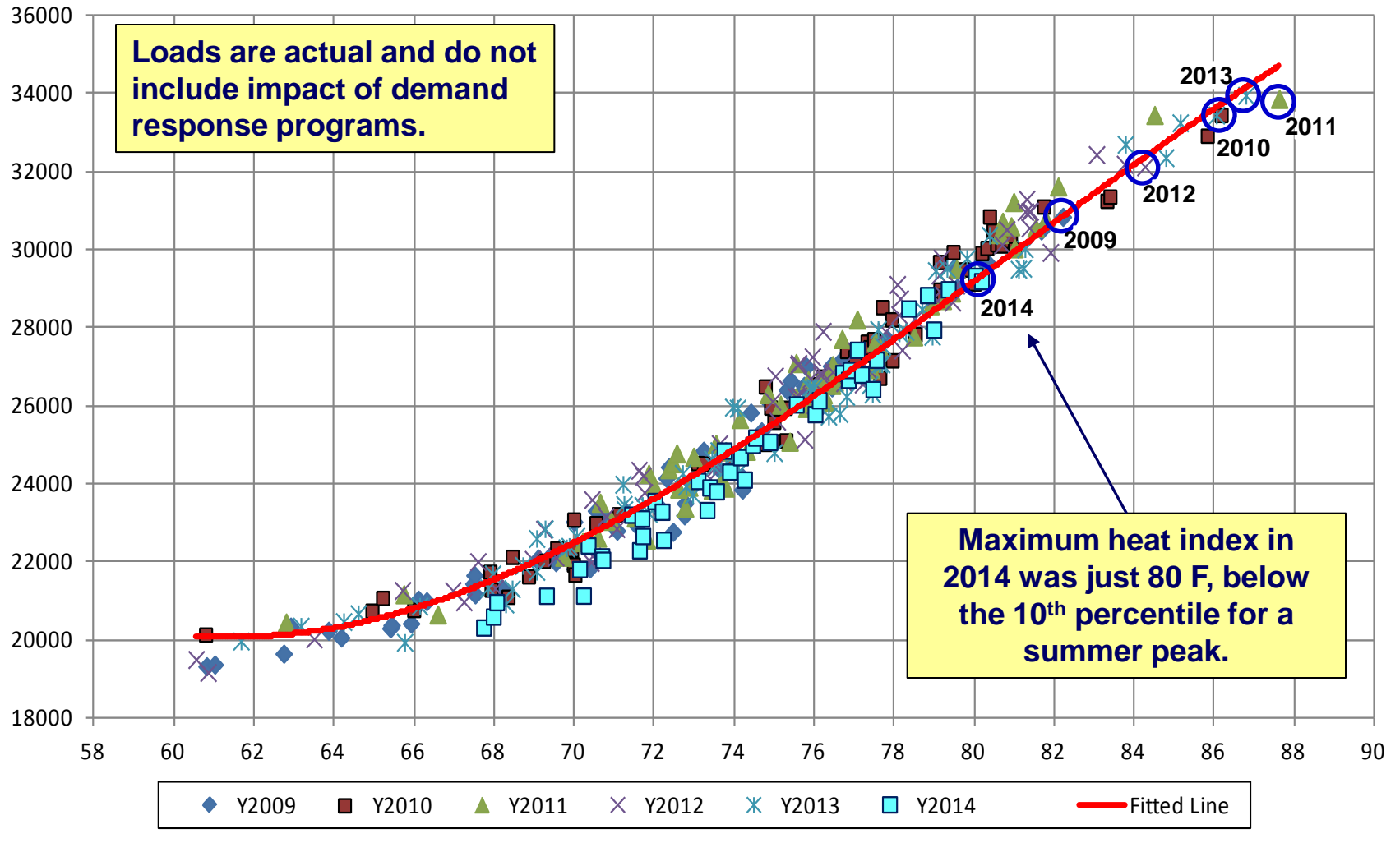
Max CTHI - Ranked Daily Normals, June NYCA



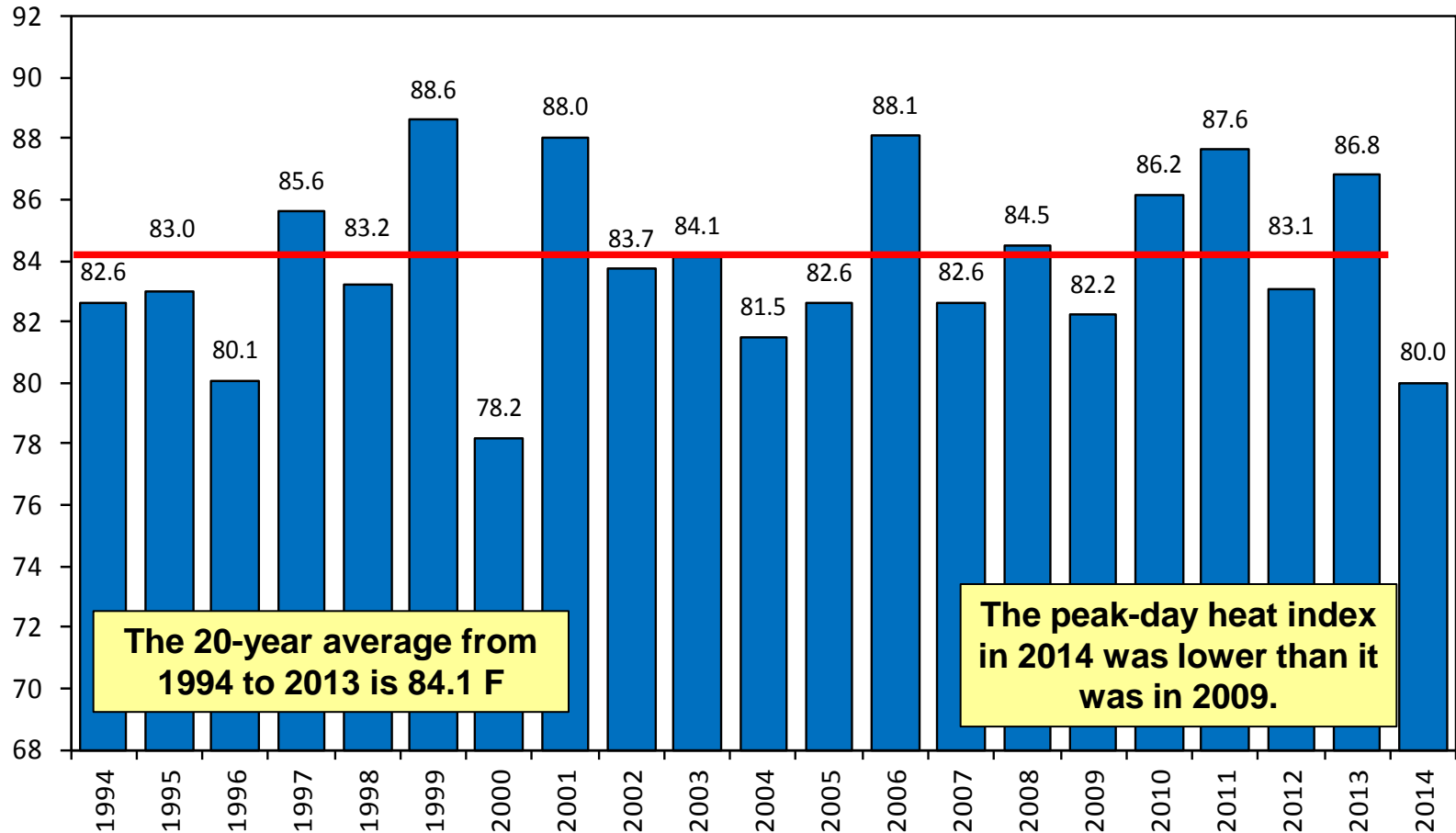
Max CTHI - Ranked Daily Normals, July NYCA



NYCA Daily Weekday Peaks vs CTHI - 2009 to 2014

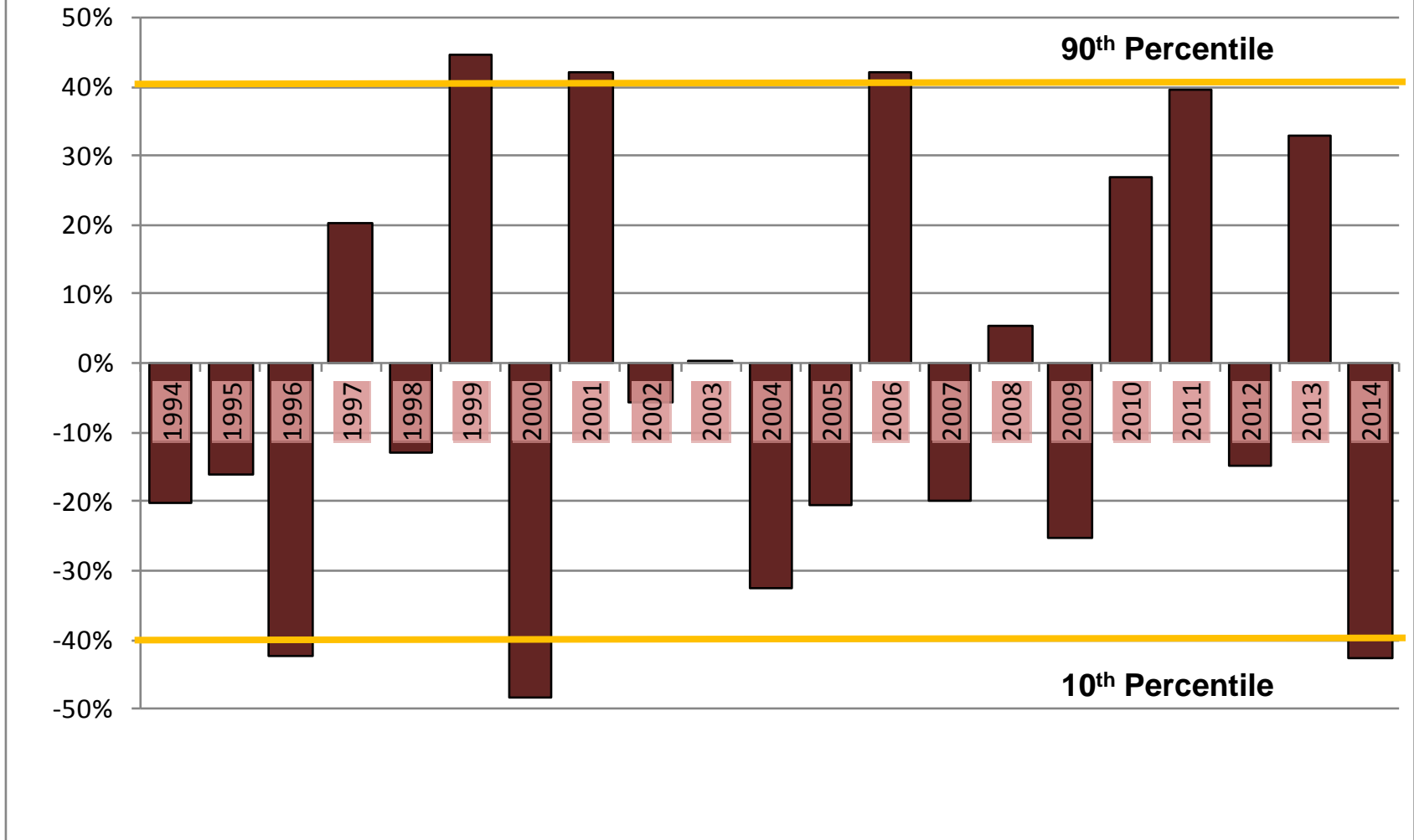


NYCA Heat Index at Time of Peak 1994 to 2014



Heat Index Percentile Over/Under 50th

1994 to 2014



The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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