NEPOOL Participants Committee Report

September 2016

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EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER

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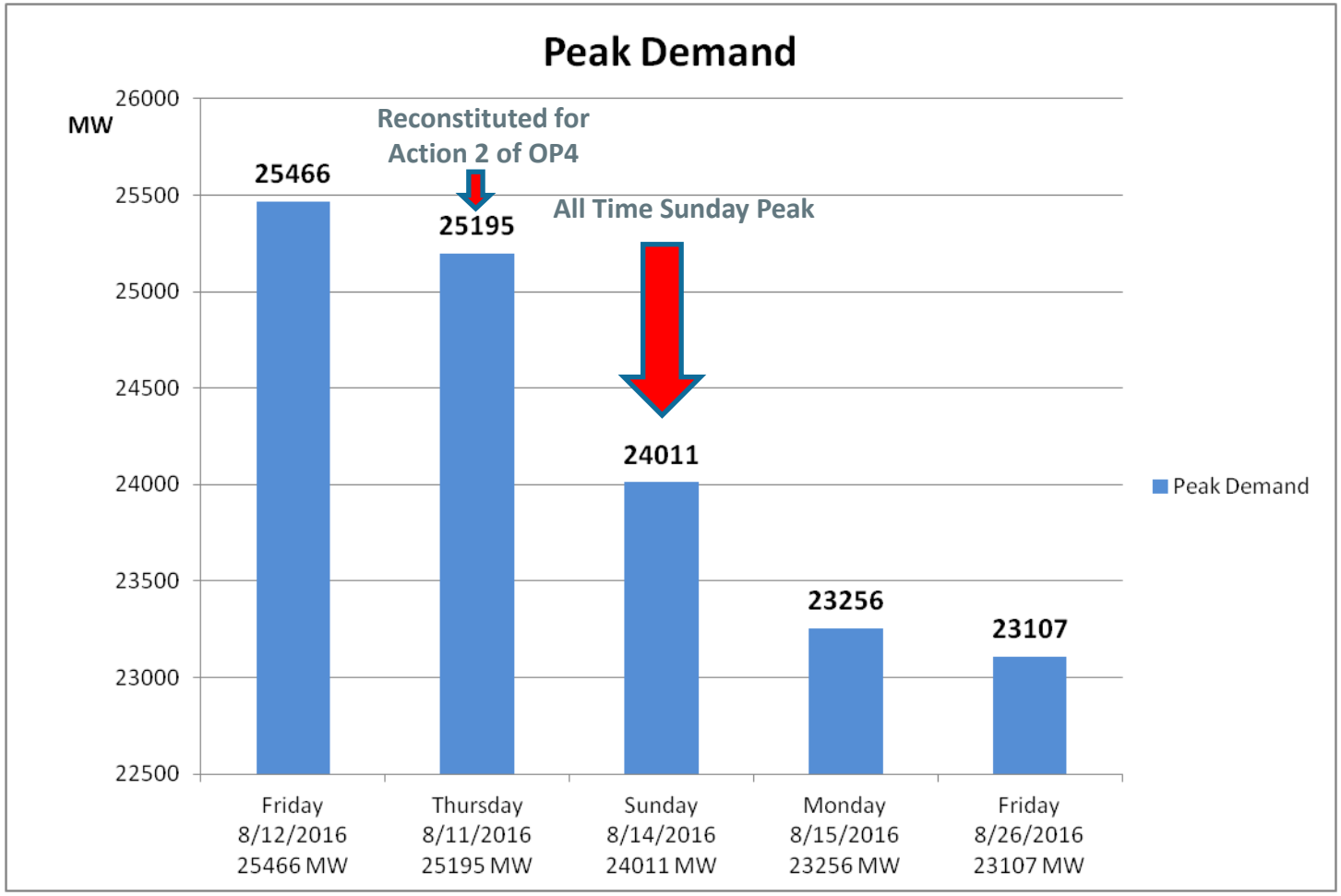
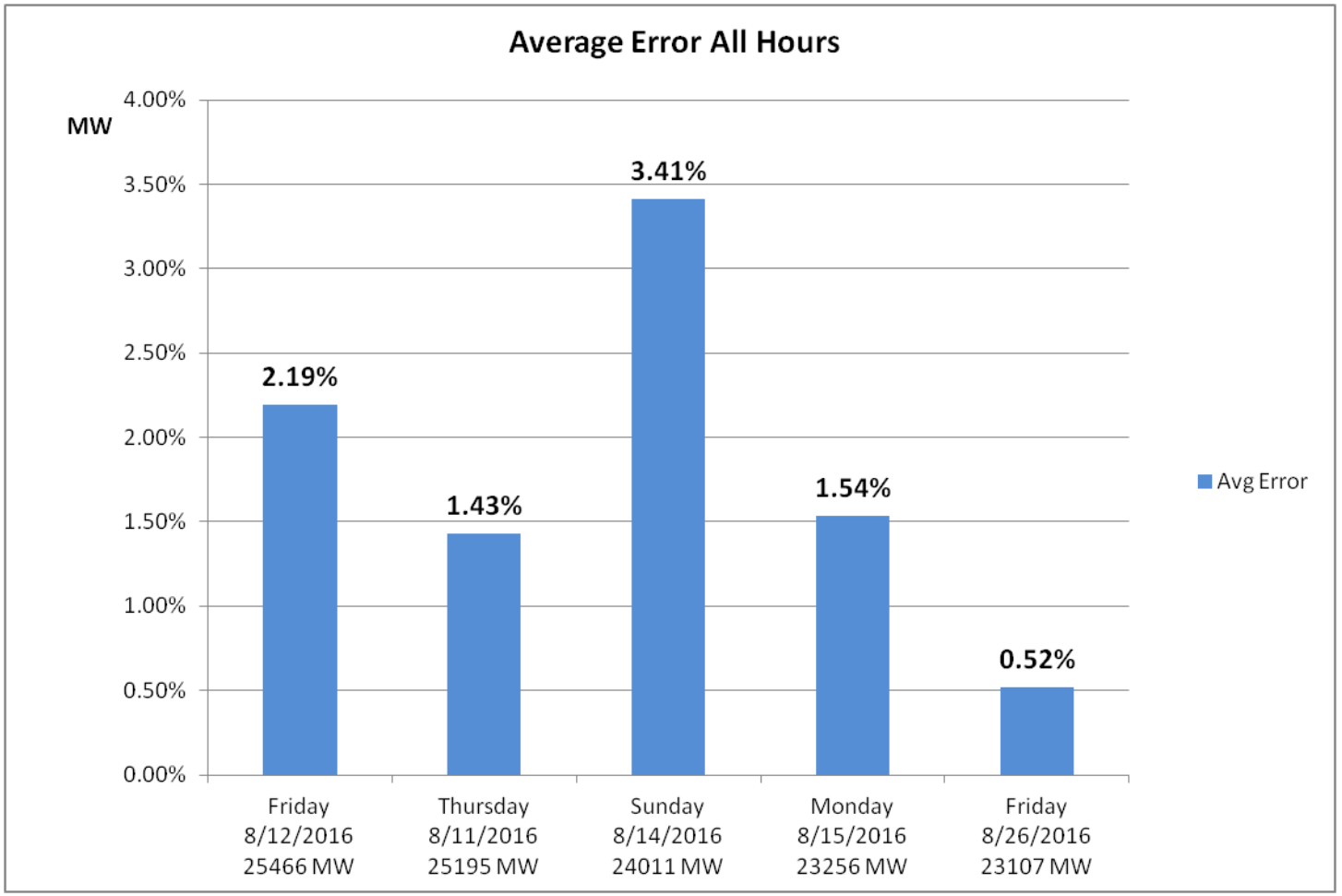
HIGHEST DEMAND DAYS AUGUST, 2016

Five Highest August Demand Days

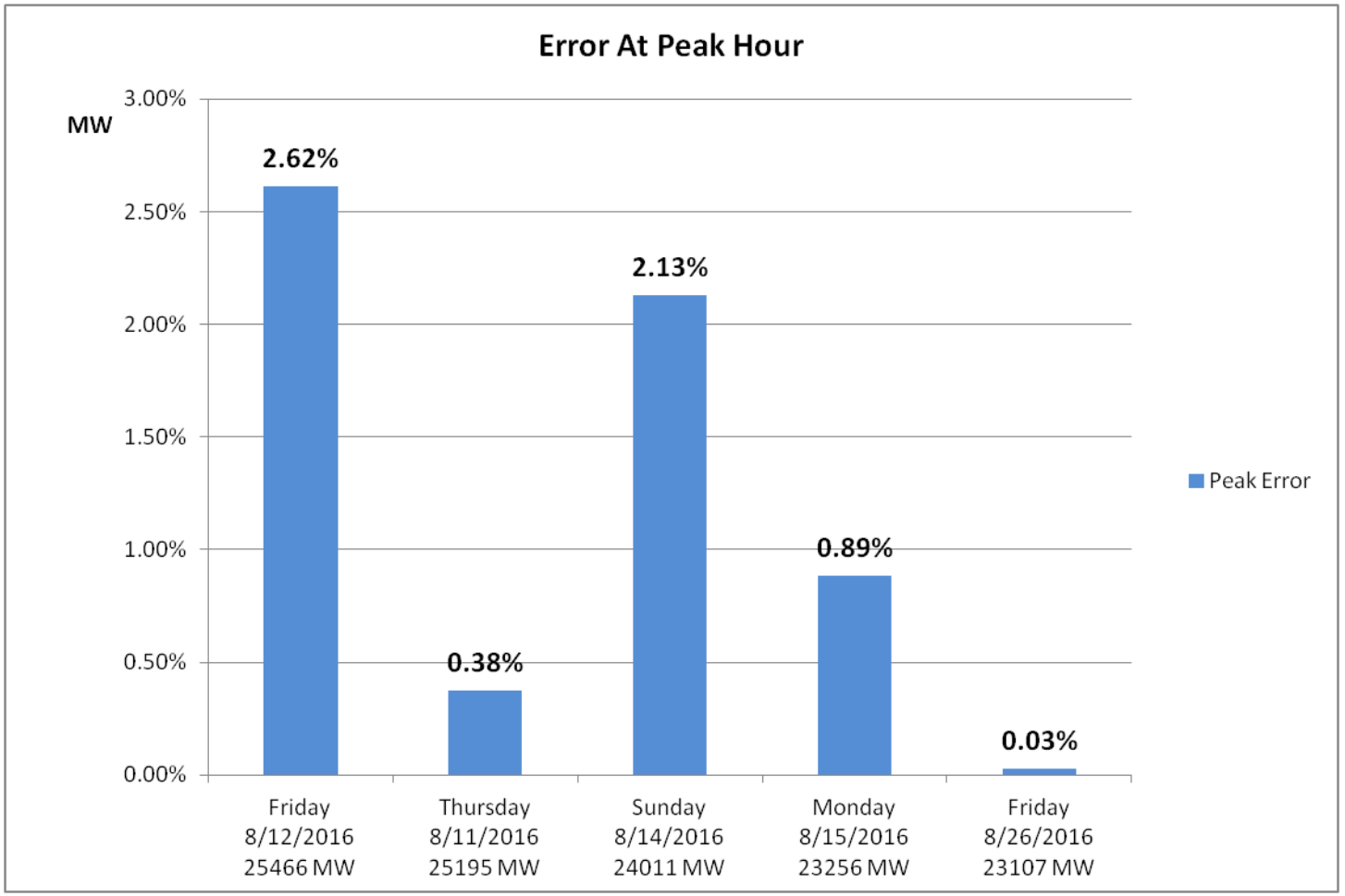
The highest demand days so far this year on the ISO New England system were in the middle of August 2016.



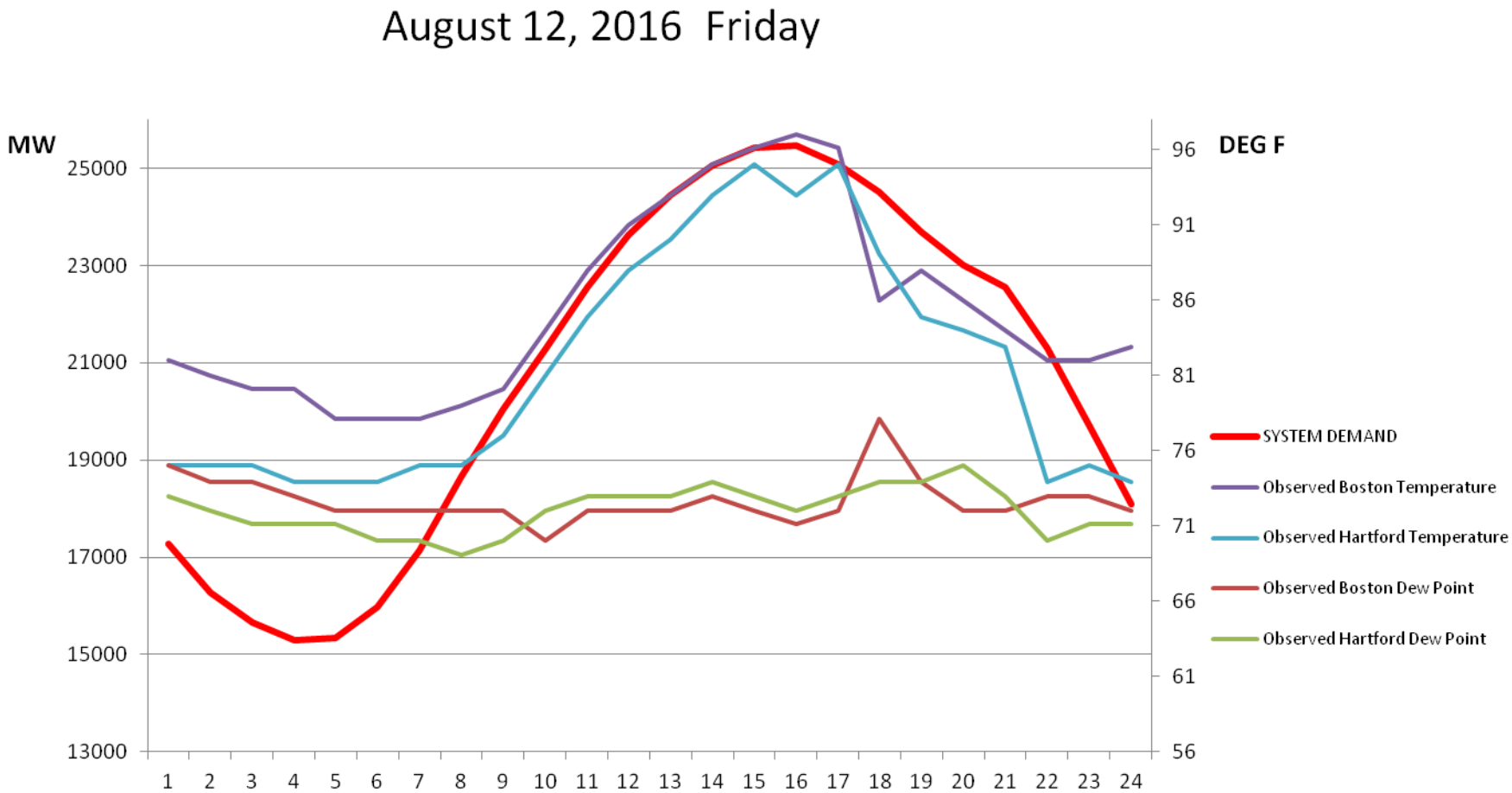
Average Load Forecast Deviation During Five Highest August Demand Days



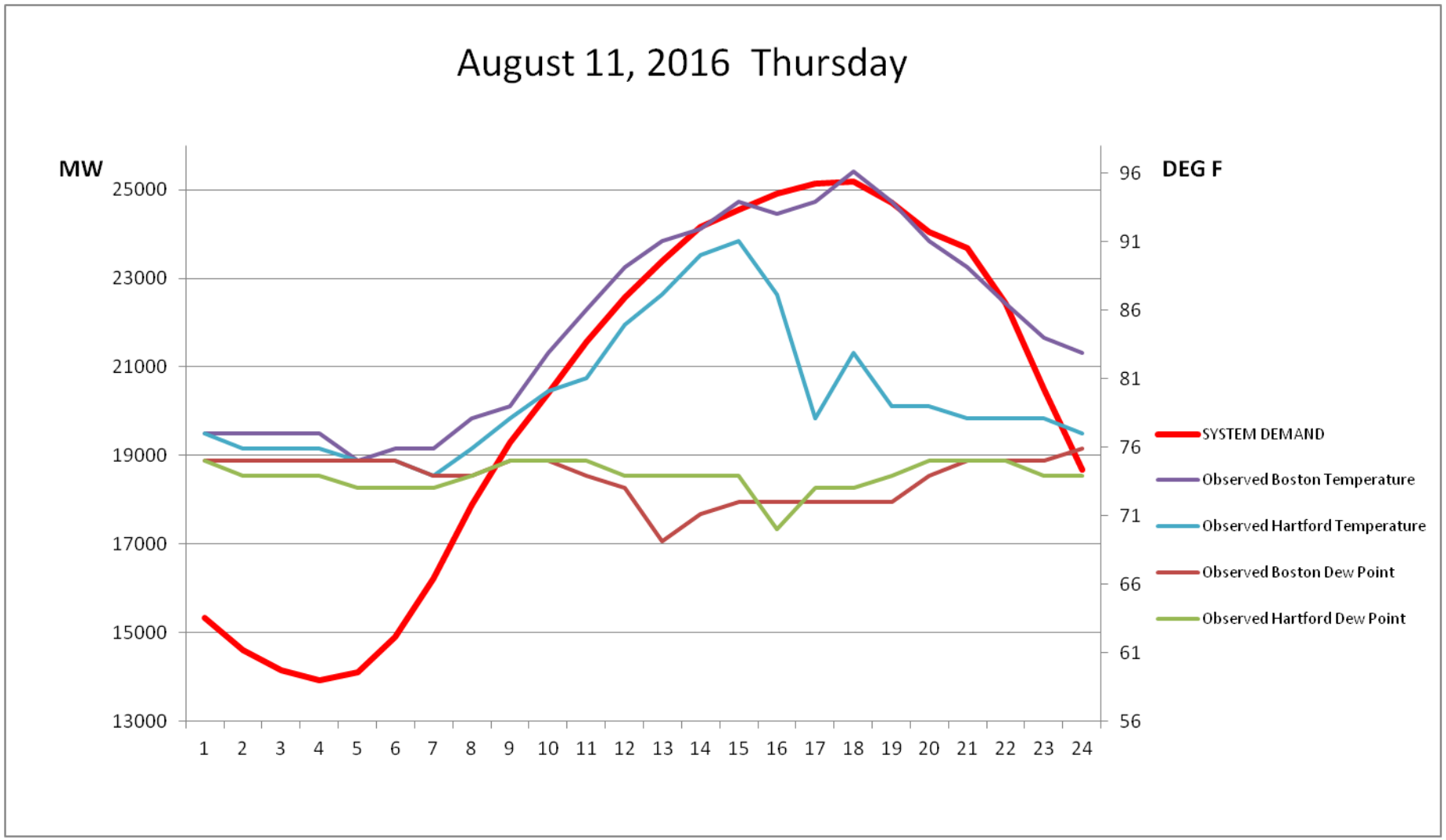
Load Forecast Deviation During Peak Hour on Five Highest August Demand Days



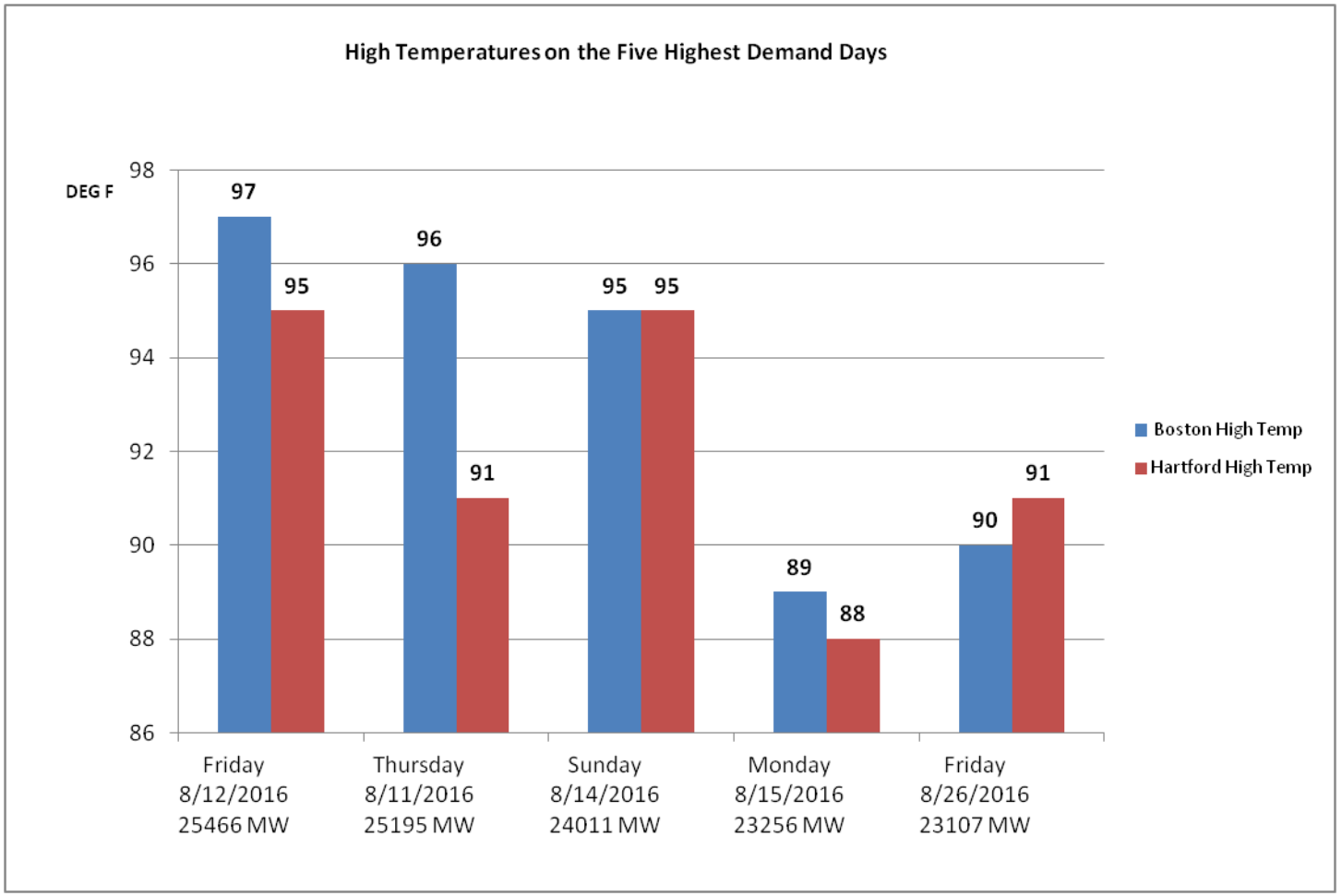
Highest August Demand Day



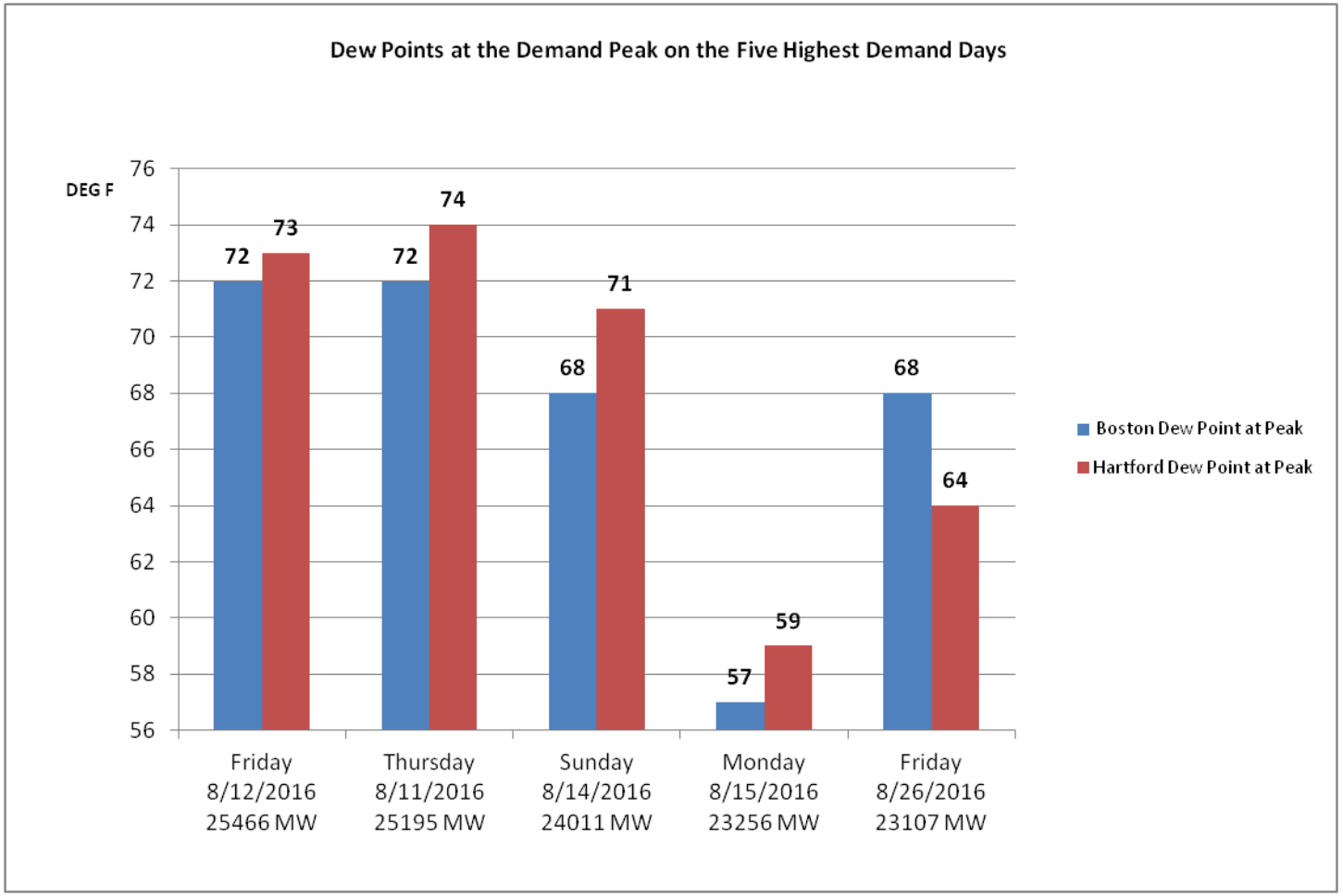
Second Highest August Demand Day



Highest August Demand Days Temperature



Highest August Demand Days Dew Points



COMPARISON OF FIVE TOP PEAK DAYS TO 2016 LONG-TERM LOAD FORECAST

Comparison of Recent Summer Peak Days to 2016 Long-Term Load Forecast

- ISO's long-term summer load forecast uses a **3-day, eight-city weighted temperature-humidity index** (WTHI)
- The table below lists the five highest peak demand days and their WTHIs this past summer with respect those of the 2016 50/50 and 90/10 summer peak load forecasts published in the 2016 CELT report

Peak Day	Day of Week	Peak Load*	WTHI
90/10 Forecast	-	29042	81.96
50/50 Forecast	-	26704	79.88
8/12/2016	Fri	25466	81.12
8/11/2016	Thu	25003**	78.45
7/22/2016	Fri	24285	77.89
8/14/2016	Sun	24011	79.95
7/26/2016	Tue	23843	76.89

Notes:
* Forecast loads are net of passive and active Demand Resources and behind-the-meter PV; Actual peak loads are those measured in real-time
** Peak is not reconstituted for Real Time Demand Resources dispatched during OP#4, Action 2

Summer Seasonal Peak: Friday – August 12, 2016
Observed Load vs. 2016 Seasonal Peak Forecast

- On August 12th, the observed weather* at ISO's eight weather stations in the region was hotter than the weather assumed for the 50/50 long-term load forecast, but less severe than the 90/10 forecast
- Despite the hot weather, the observed system peak load on August 12th was about 1,200 MW lower than the 50/50 summer load forecast, primarily due to two factors
  1. It was a Friday peak – Based on previous analysis, peaks loads on Fridays can be more than 1,000 MW lower than other non-holiday weekdays, given similar weather
  2. Areas of localized thunderstorms and rain passed through some load centers immediately preceding and during the peak, resulting in reduced loads
     - Some storms were located in areas outside of ISO's eight weather stations, and were therefore not well reflected in ISO's measured weather during the peak hour
     - Radar imagery during the peak are shown on the next slide(s)

Note: * ISO's long-term summer load forecast models use a 3-day, eight-city weighted temperature-humidity index (WTHI)