

# Load Forecast Accuracy

This performance measure is intended to show how well the PJM Interconnection, L.L.C. forecasts the PJM system load for both on-peak and off-peak periods.

Load forecast error is the difference between the metered actual hourly integrated PJM load for the peak or valley hour and the load forecast for that on-peak or off-peak period, respectively. Performance is measured by the absolute percent of error statistics which are calculated by dividing the absolute value of the load forecast error by the forecast load as follows:

Load Forecasting Error (%) =  $ABS [ \text{Actual Load} - \text{Forecast Load} ] / \text{Forecast Load}$   
The two daily load forecasts used for this measure are: the latest revision of the peak load forecast that was in effect eight hours prior to the forecast peak hour of the day; and, the latest revision of the valley load forecast that was in effect four hours prior to the forecast valley hour.

## **Performance Measure**

Performance is based on the load forecasting error (as an absolute percent of error) that was achieved for 80% of the forecasts made during the month.

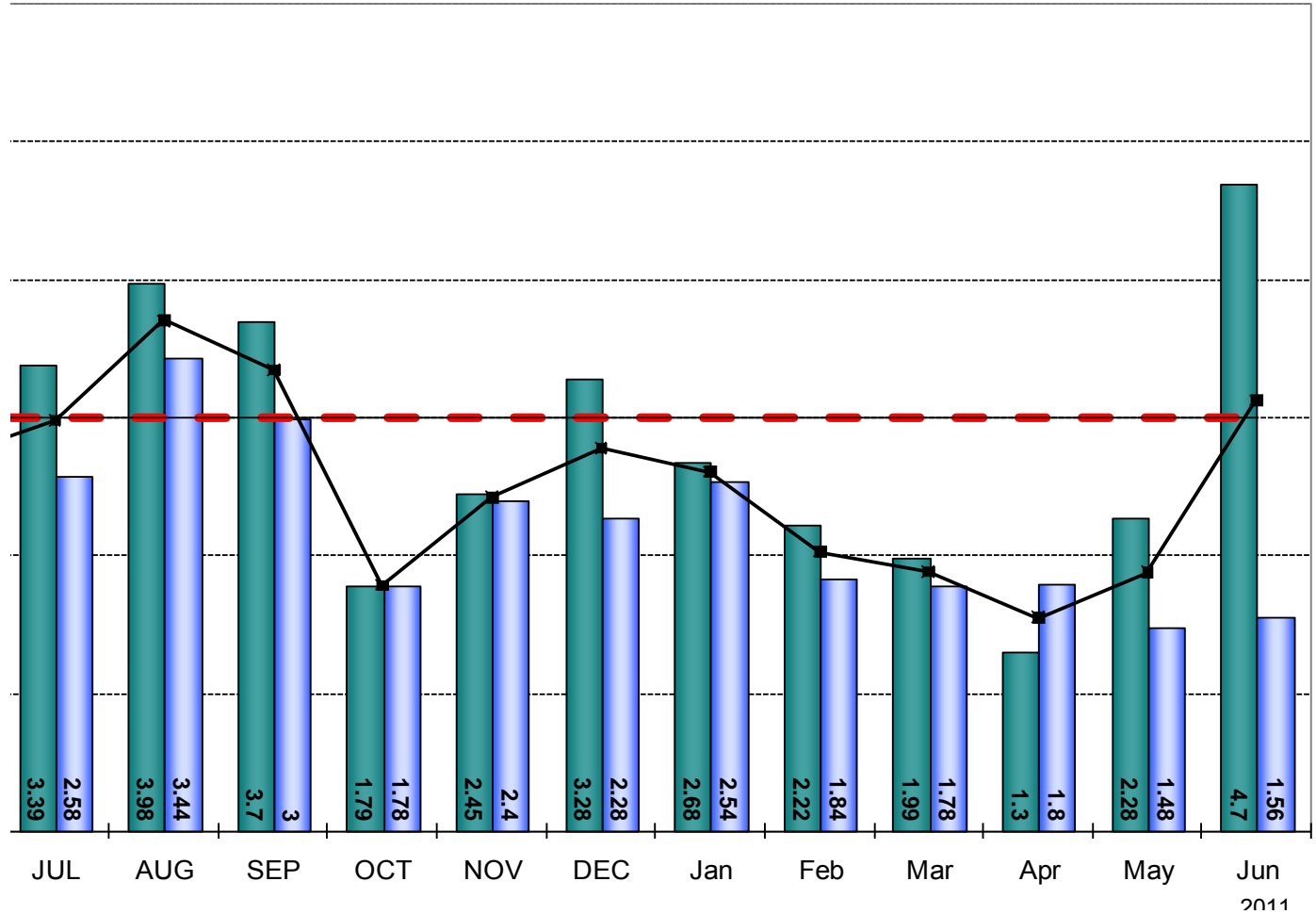
**June Performance                      3.13% (96.87%)**



# Load Forecasting Error (Achieved 80% of the Time)

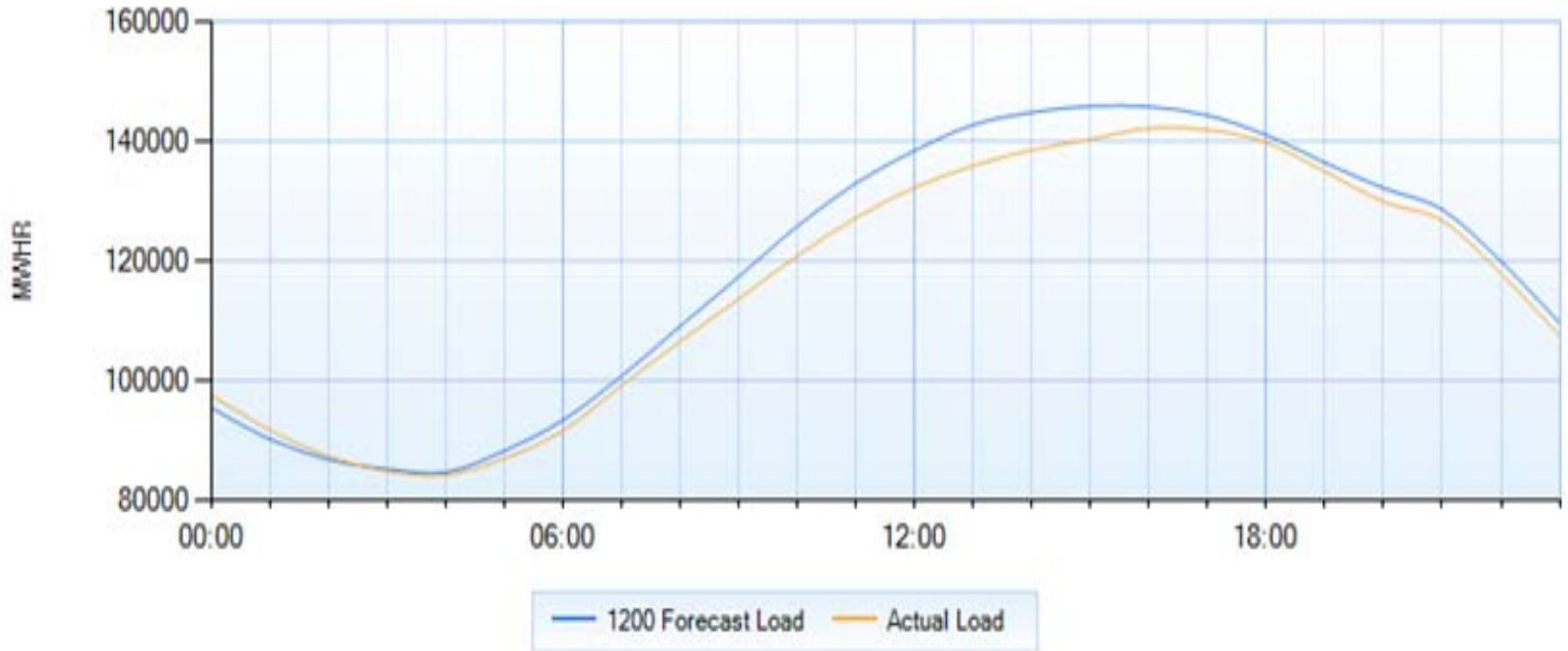
## LOAD FORECASTING ERROR

On-Peak Off-Peak Average



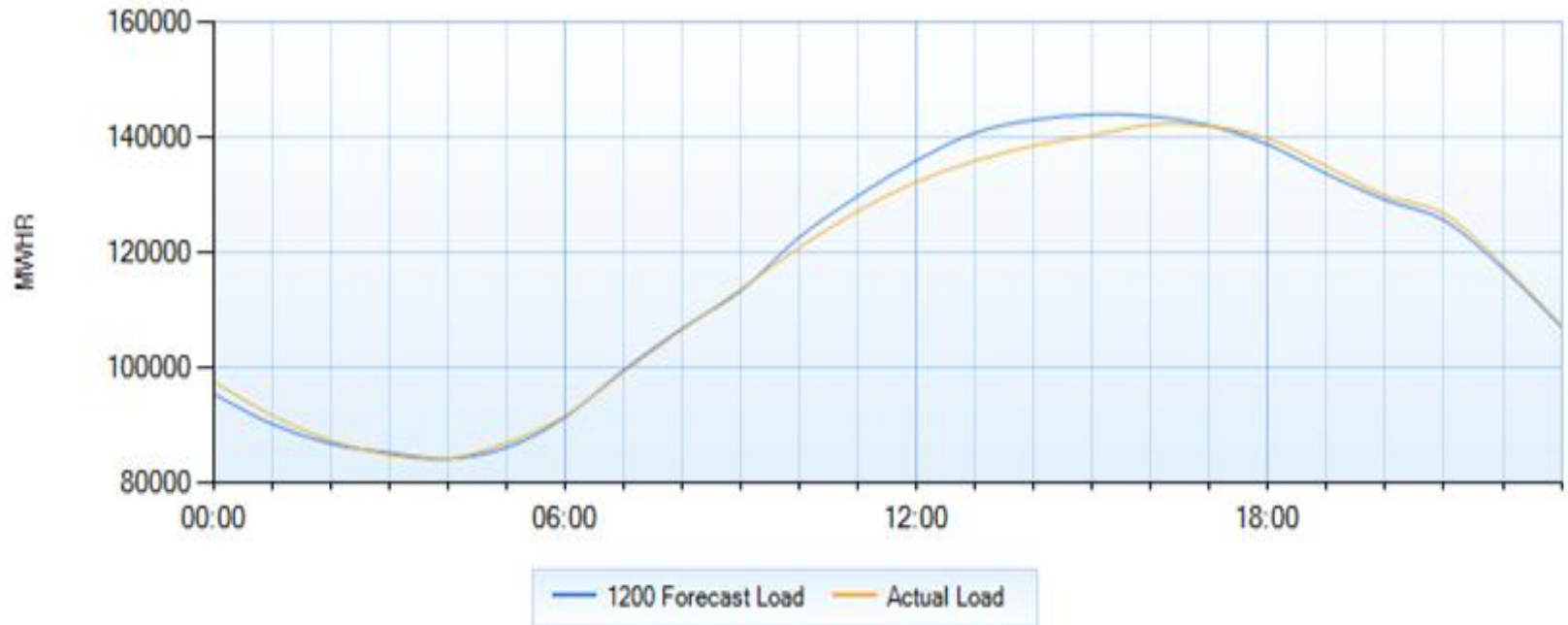
## LOAD FORECAST SHAPE DAILY METRIC - 7/12/2011 - "RTO" zone

1200 Forecast Fit - Fit% 97.83%



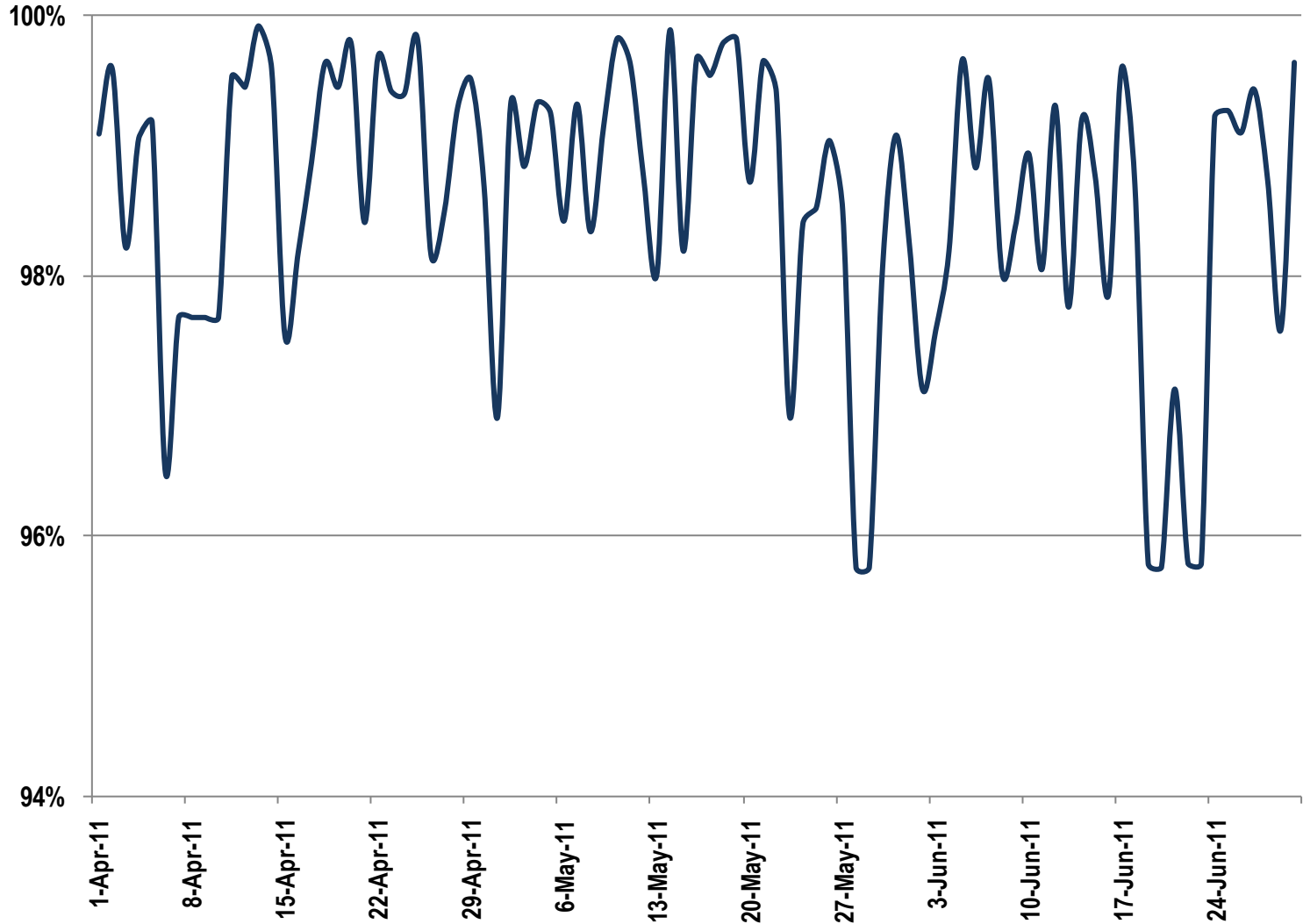
## LOAD FORECAST SHAPE DAILY METRIC - 7/12/2011 - "RTO" zone

1800 Forecast Fit - Fit% 99.54%



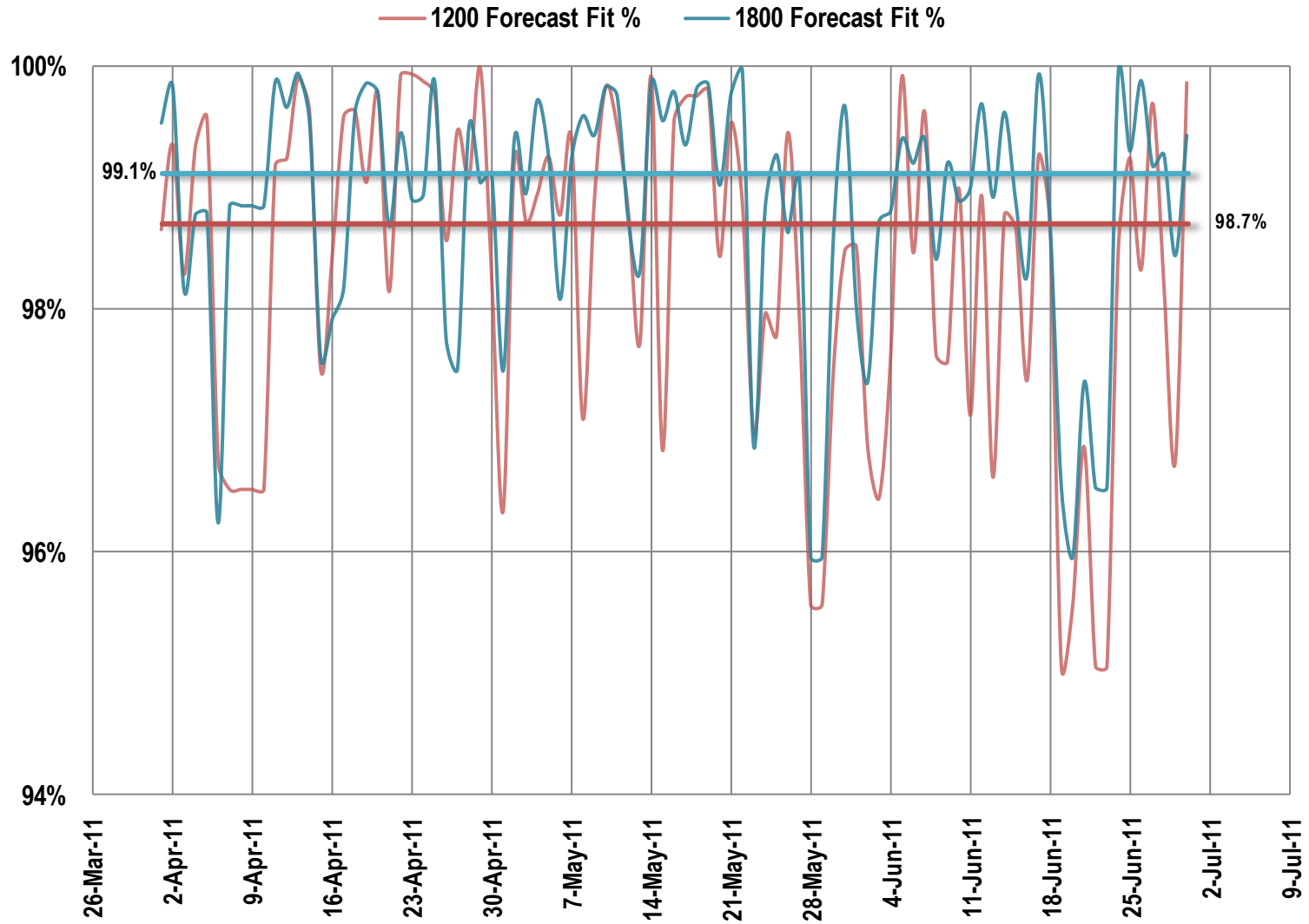


# Load Forecast Accuracy – 1200 / 1800 Average





# Day Ahead Load Forecast Accuracy – 1200 vs 1800



- Members expressed interest in a day-ahead metric to track load forecast error near the 08:00 timeframe.
- PJM dispatch currently forecasts next day load on each shift at approximately the following times
  - Midnight period forecast      01:00-03:00
  - Day period forecast              08:00-11:00\*
  - Evening forecast                 15:00-18:00

\*Current 12:00 metric may satisfy this request.

- PJM 7-day load forecasts are posted at the following link  
<http://oasis.pjm.com/doc/projload.txt>
- The postings are updated every half-hour on the 15 and 45 minute time intervals.
- Load forecasts are revised by PJM dispatch as needed but typically as outlined on the previous slide.



Updated as of: 7-13-2011 1900

Constrained operations ARE expected in the AEP, AP, CE ,BC, DOM, PE, PEP, PN, and PS zones on 07-14-2011.

Constrained operations ARE expected in the AEP ,AP, CE ,BC, DOM, and PS zones on 07-15-2011.

The PS/ConEd 600/400 MW contract is not expected to be limited on 07-14-11.

df

Data updated as of THU JUL 14 14:15:19 2011.

### MID ATLANTIC REGION HOUR ENDING INTEGRATED FORECAST LOAD MW

Date		1	2	3	4	5	6	7	8	9	10	11	12
07/14/11	am	31378	29550	28125	27165	27215	28000	29700	32700	35200	37290	38670	39740
	pm	41000	41850	43016	43936	44533	44146	42770	41158	40366	38928	35791	32414
07/15/11	am	29392	28625	27123	26401	26483	27549	29500	32459	35154	37629	39898	41795
	pm	43231	44659	45627	46304	46685	46315	44736	42652	41029	40129	37314	34201
07/16/11	am	31172	29031	27483	26468	25956	25861	26163	28347	31623	35044	37873	40327
	pm	41928	42951	43542	43704	43582	42670	41394	39852	38406	37767	35667	33061
07/17/11	am	30520	28571	27100	26184	25656	25398	25260	27036	30069	33321	36172	38792
	pm	40640	42028	42965	43692	44189	44198	43394	42109	41105	40570	38035	35052
07/18/11	am	32290	30419	29131	28494	28523	29605	31472	34672	38075	41386	44436	47148
	pm	49127	50912	52032	52817	53217	53075	51543	49438	47810	46522	42952	39018
07/19/11	am	35861	33516	31925	30981	30927	31934	34014	37494	41238	44794	48292	51384
	pm	53704	55559	56582	57090	57285	56878	55039	52640	51029	49400	45637	41693
07/20/11	am	37862	35495	33811	32773	32599	33605	35412	38780	42411	45924	49190	52129
	pm	54236	55964	56872	57169	57036	56219	54214	51827	50271	48651	44995	41152

<http://oasis.pjm.com/doc/projload.txt>