

Department of Market Monitoring Report



Jeff McDonald, Ph.D.
Department of Market Monitoring



California ISO
Your Link to Power

Board of Governors Meeting
General Session
October 17, 2007

Introduction

Summer 2007 Market Performance

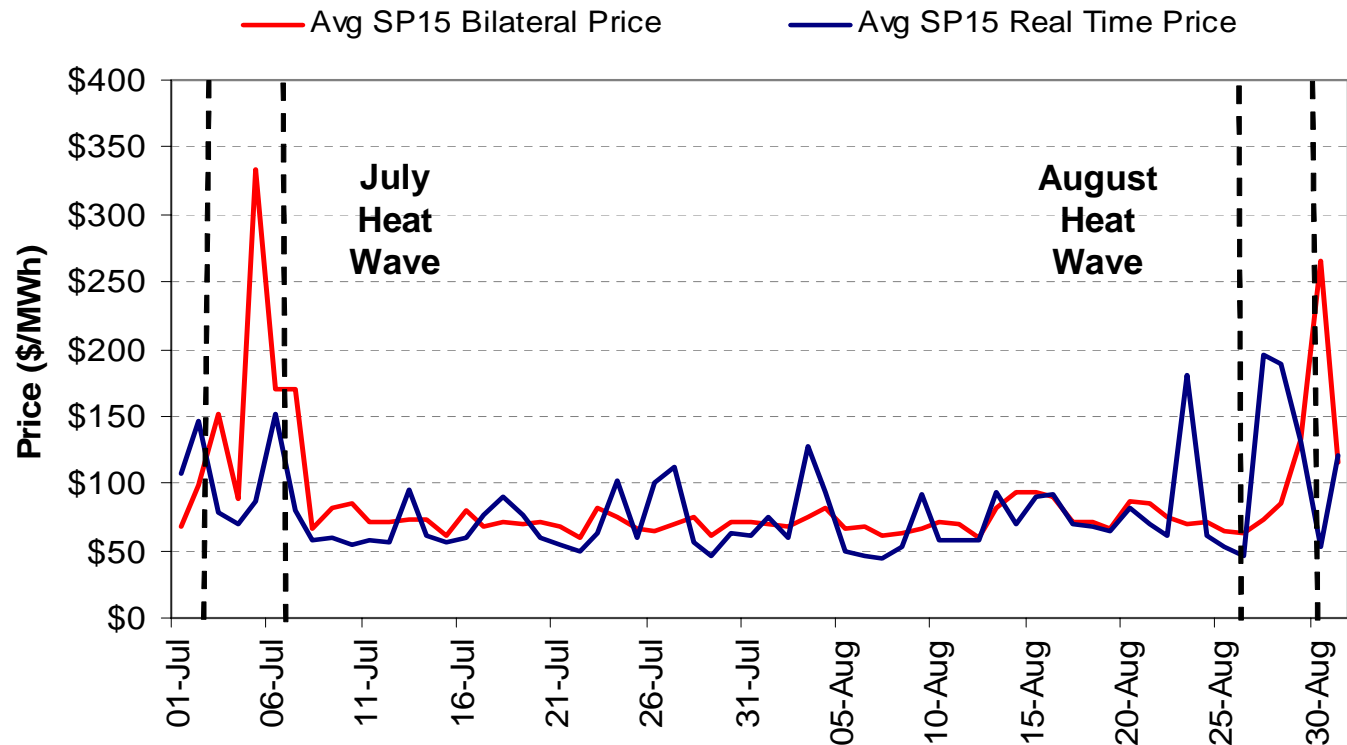
- Lower peak loads helped mitigate potential market impacts of low hydro availability.
- Energy and A/S prices were moderate throughout summer.

Generator Forced Outage Reporting Compliance

- Timely reporting of forced outages helps grid reliability.
- Significant decline in number of late forced outage reports since beginning enforcement on July 1, 2007.

Summer 2007 Market Performance

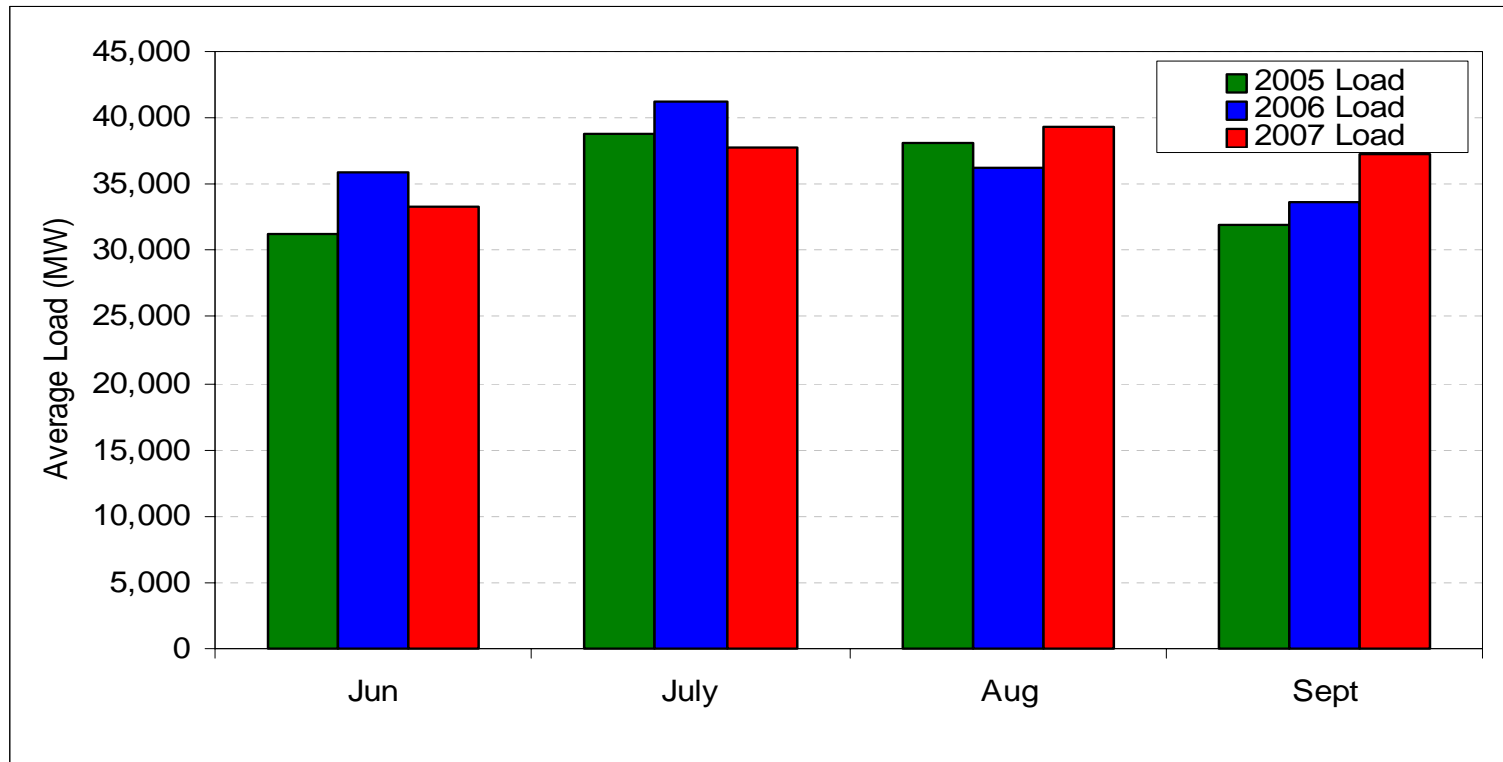
Average Prices for Energy for Super-Peak Hours
July 1 – September 15, 2007



- Imbalance energy prices tracked spot bilateral prices well across summer, including July heat wave.
- Prices not correlated during August heat wave (impact of forecast error on imbalance market).
- Day-ahead A/S prices tracked spot bilateral prices well during high loads (not shown).

Summer 2007 Market Highlights

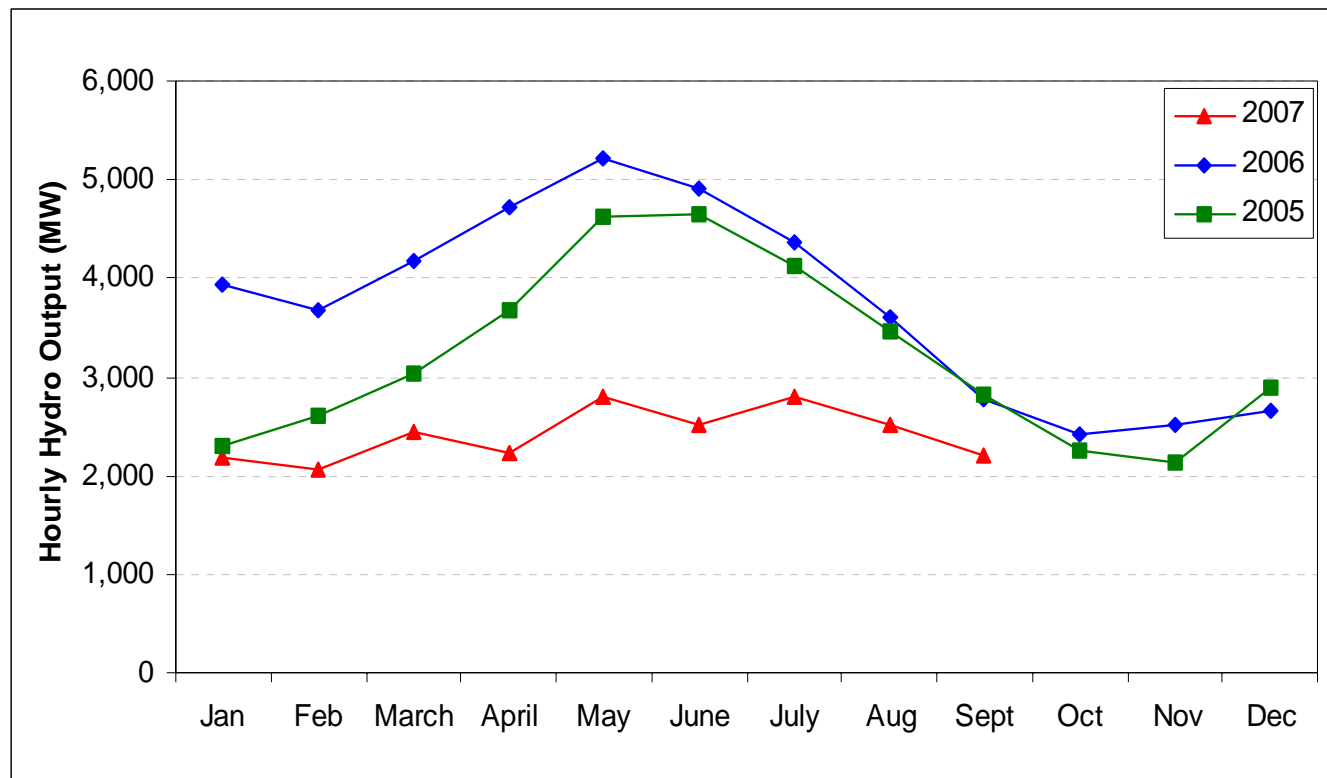
Average Loads for Super Peak Hours (12-18), Jun 1 – Sep 15



- ⦿ Average super peak loads in July 2007 were approximately 3,000 MW lower than in 2006.
- ⦿ Average super peak loads were higher in August and first half of September of 2007

Summer 2007 Market Highlights

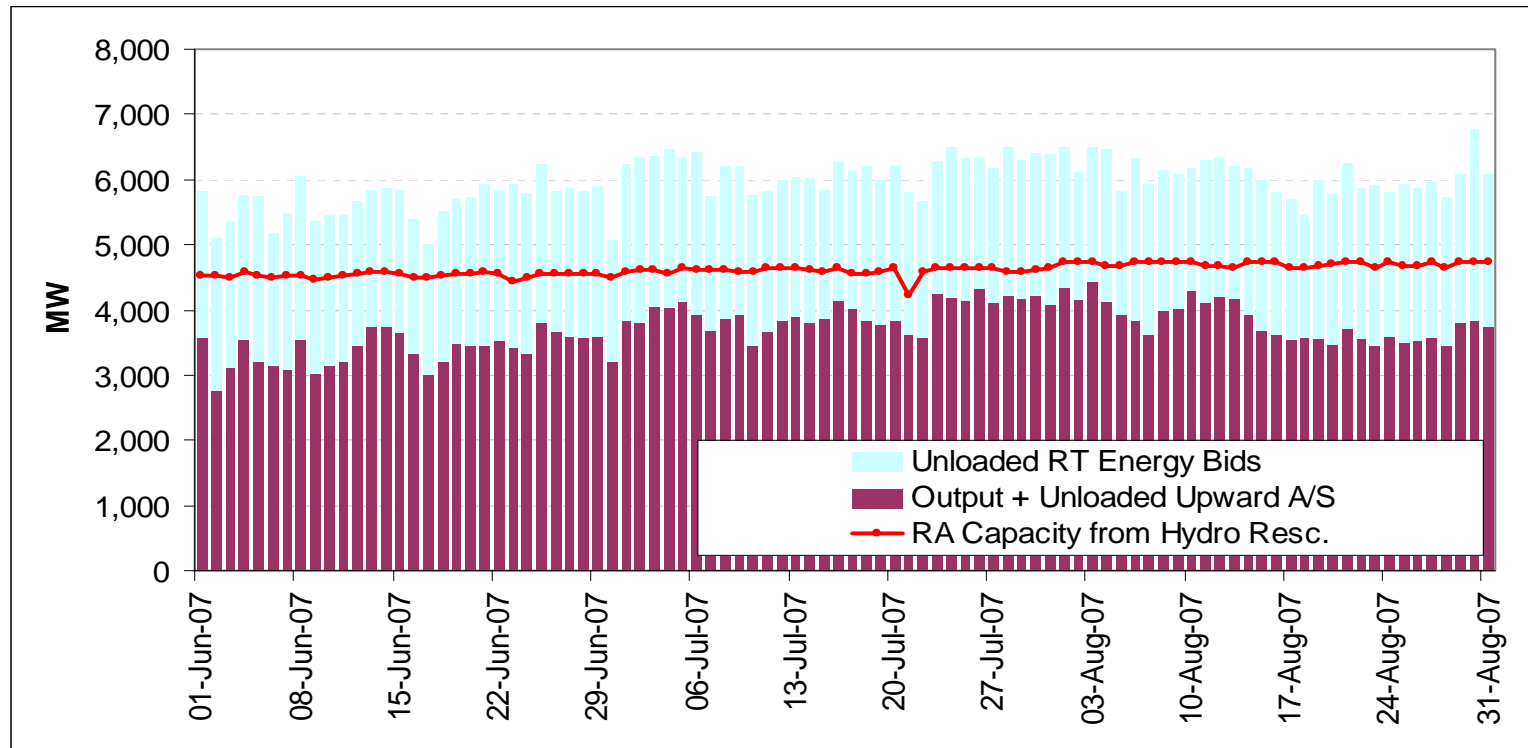
Average Hourly Hydroelectric Output by Month for 2005 - 2007



- Output from hydro resources significantly lower.
- Successive low hydro years may compound limited availability.

Summer 2007 Market Highlights

Peak Hour RA Capacity and Availability from Hydroelectric Units
June – August, 2007



- Roughly 4,500 MW of RA hydro capacity.
- Qualifying capacity dependent upon 1-in-5 dry hydro scenario.
- Counting rule should be reviewed if California experiences another dry hydro year.

Generator Forced Outage Reporting Compliance

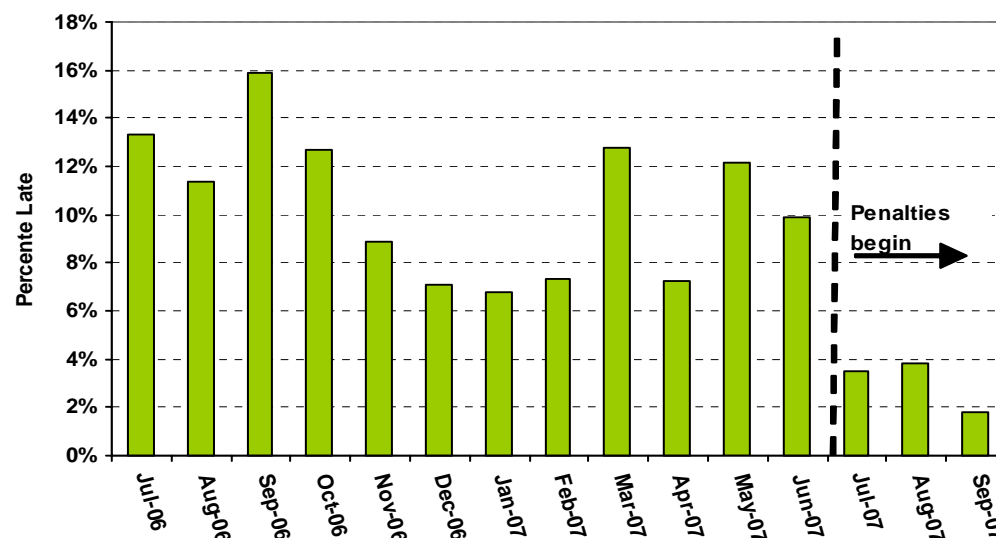
Background

- 🌐 Timely outage reporting required by Grid Operations for reliability management of the grid.
- 🌐 Tariff Amendment filed in October 2006 to enact enforceable outage reporting requirements.
- 🌐 DMM began enforcing requirements on July 1, 2007
 - Forced Outage Reporting within 30 Minutes. Sanctions range from warning letter to \$5,000 per outage.
 - Forced Outage Explanations within Two Days. Penalty for non-compliance is \$500 per day late.

Generator Forced Outage Reporting Compliance

Reporting Within 30 Minutes:

- Prior to July 2007, 8 to 12 percent of forced outages were not reported within the 30 minute requirement.
- Less than 4% reported late in July and August.
- Less than 2% reported late in September.



Explaining Within 2 Days:

- Prior to July 2007, 30% to 40% of explanations for forced outages were submitted late (or not at all).
- Non-compliance dropped to 5% in June and 1% in September after penalties went into effect.
- Explanations now provided for 100% of forced outages.

