



# OPERATIONS MONTHLY REPORT

**April 2004**

## **ERCOT System Operations**

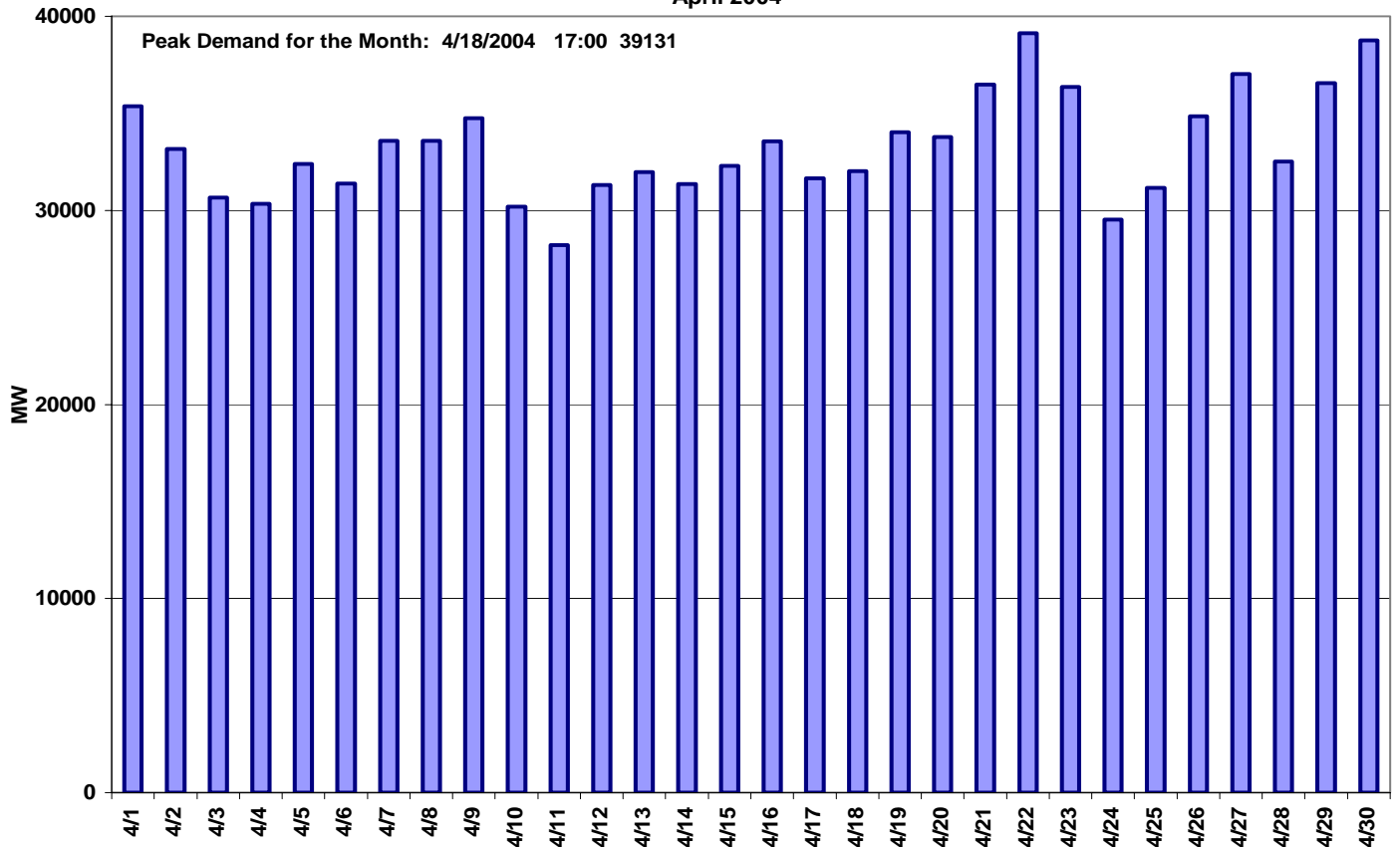
Kent Saathoff, Director  
Joel Mickey, Manager

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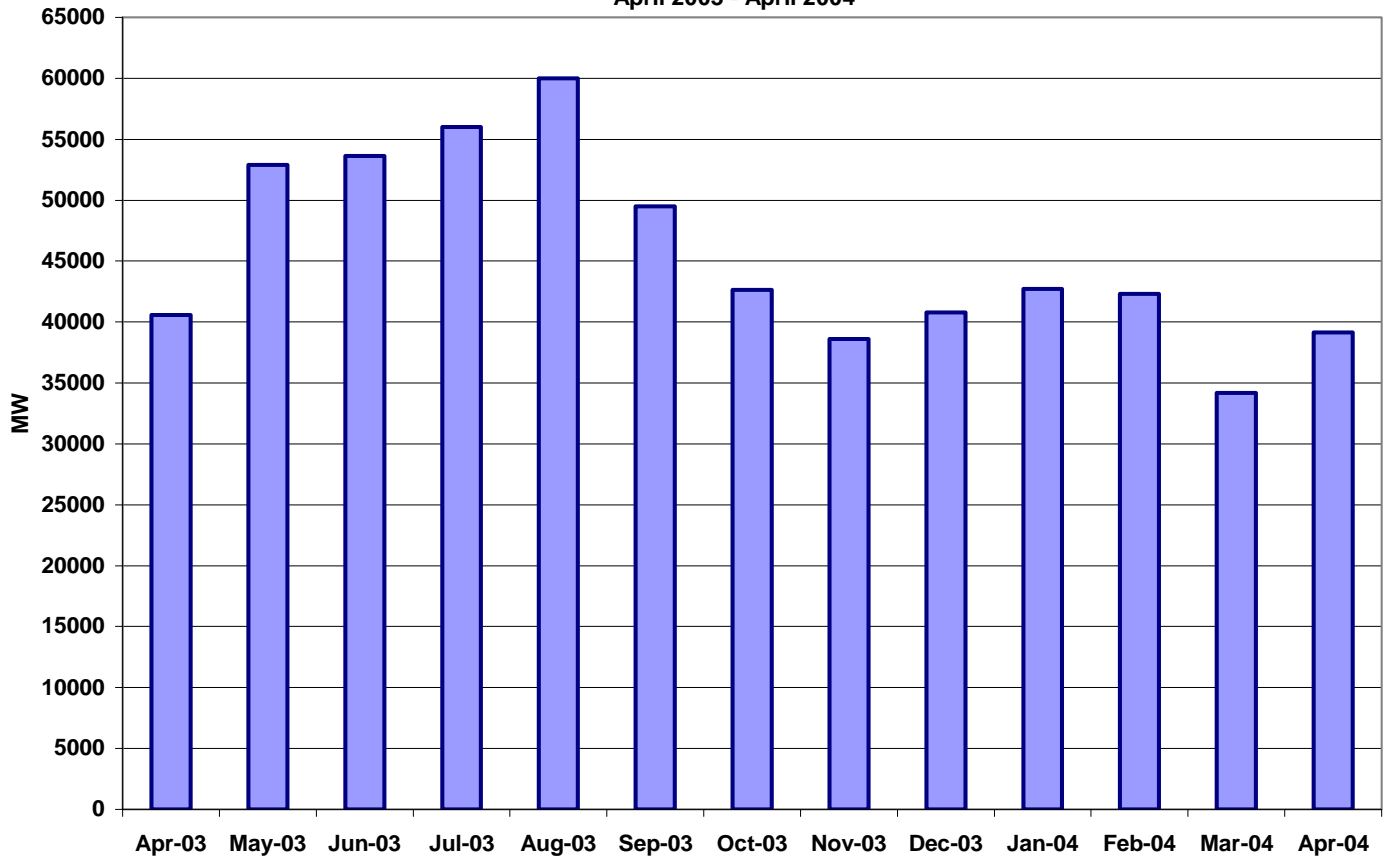
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# Grid Operation

**Daily Peak Demand  
April 2004**

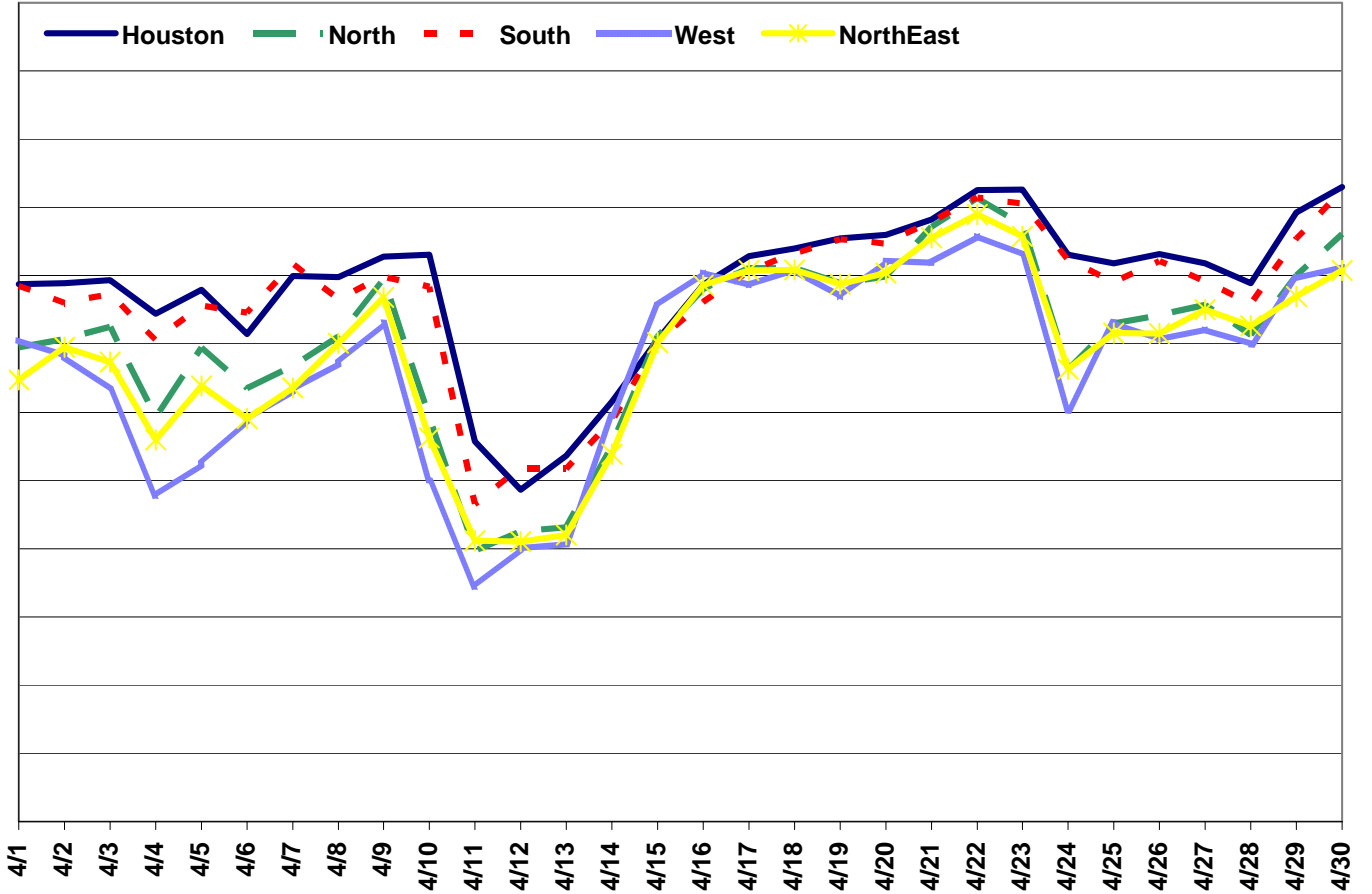


**Monthly Peak Demand  
April 2003 - April 2004**



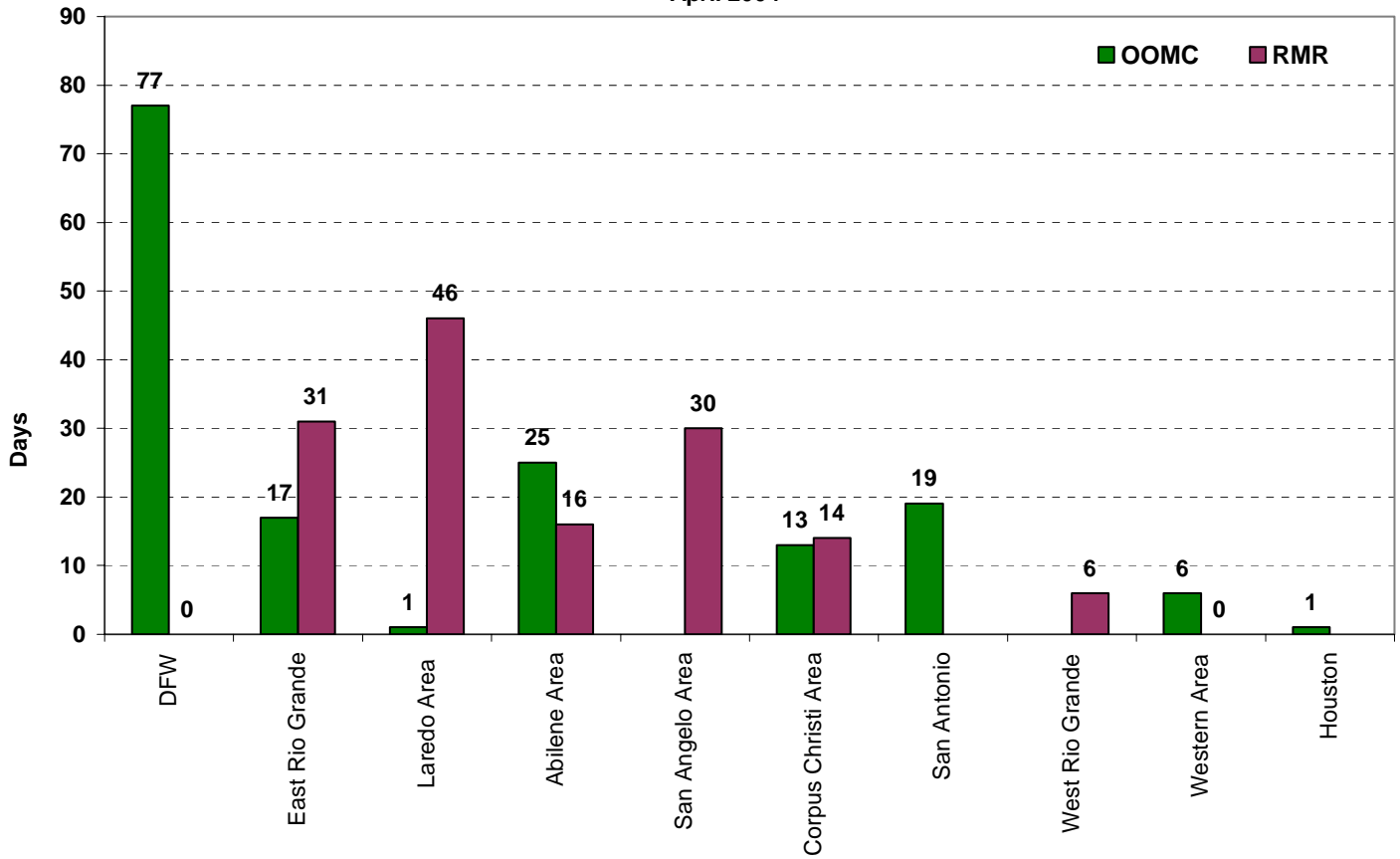
Note: Peak Demand is Peak Interval Demand

Trend of Temperature in Four Congestion Management Zones



## OOMC and RMR Activity

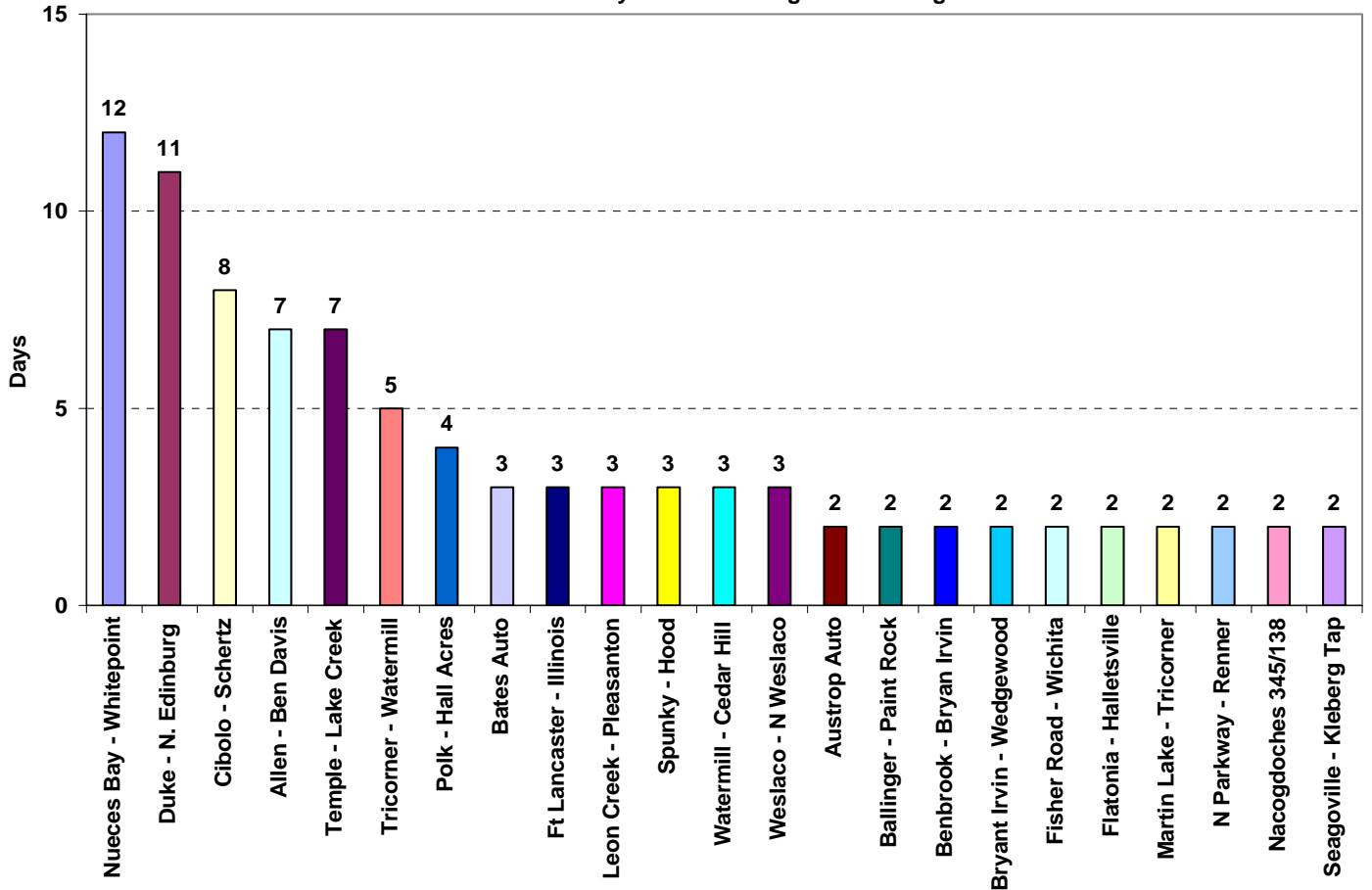
**Relative Activity Capacity Purchases - OOMC & RMR**  
April 2004



Note: 1 Unit-Day = 1 unit procured during any time period within one trade day.

### Local Congestion Management

**Total Number of Days of Local Congestion Management**

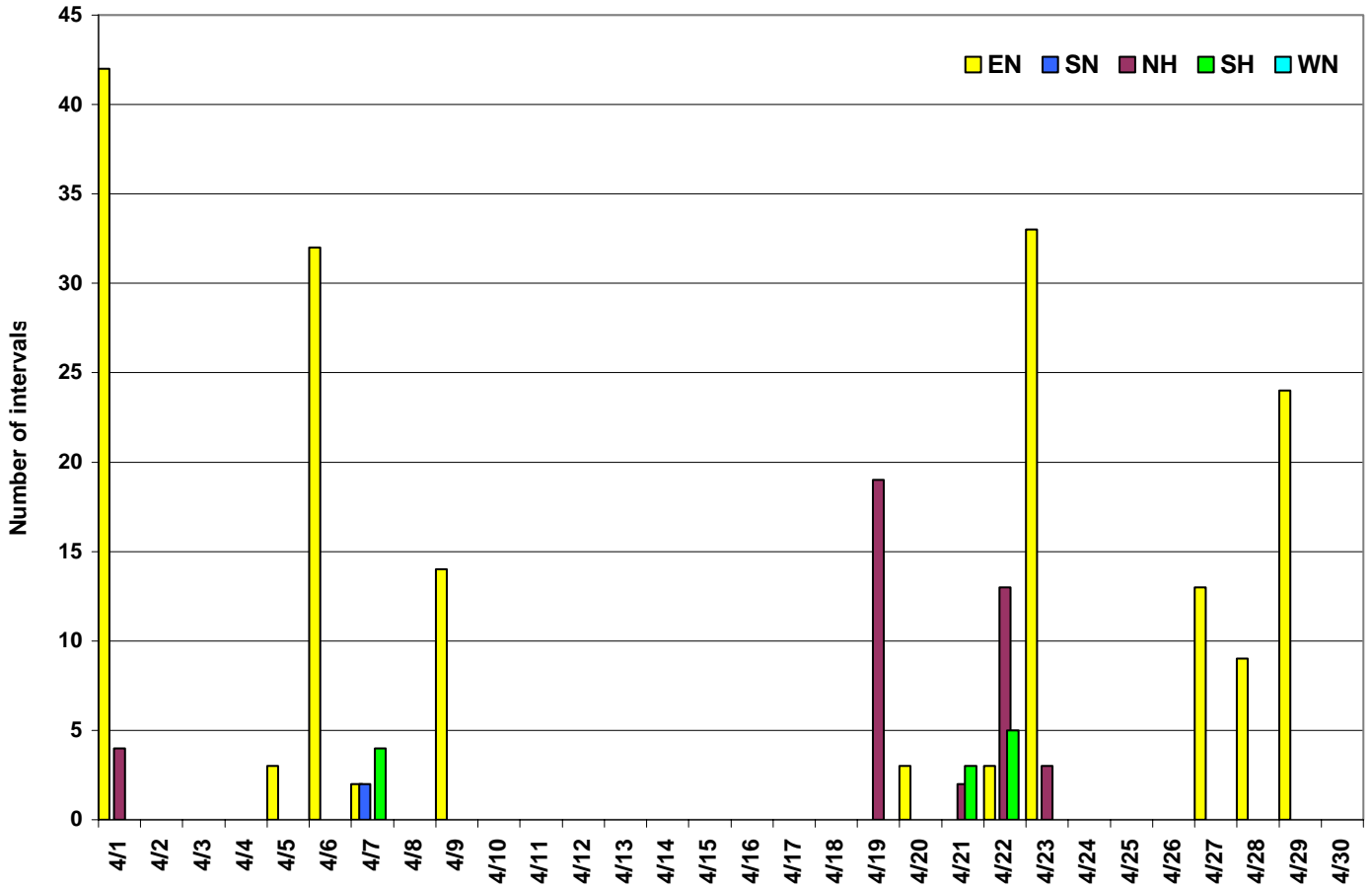


Contingency	Congestion Element	Number of Days
Lon Hill Whitepoint	Nueces Bay - Whitepoint	12
Duke - Pharr	Duke - N. Edinburg	8
Marion - Hill Country/ Skyline	Cibolo - Schertz	8
Monticello - Allen/Royse	Allen - Ben Davis	7
Temple - Lake Creek/Tradinghouse	Temple - Lake Creek	7
Big Brown - Venus	Watermill - Cedar Hill	3
Big Lake - N McCamey	Ft Lancaster - Illinois	3
Comanche Peak -Decordova/ Wolf Hollow-Rocky Creek	Spunky - Hood	3
Duke - N. Edinburg	Duke - N. Edinburg	3
Monticello - Allen/Royse	Tricorner - Watermill	3
N McAllen - Nedin	Polk - Hall Acres	3
Pawnee - Calaveras	Leon Creek - Pleasanton	3
Rio Hondo - La Palma	Weslaco - N Weslaco	3
Austrop - Zorn	Flatonia - Hallettsville	2
Bates - Garza	Bates Auto	2
Bowman - Graham	Fisher Road - Wichita	2
Carrolton NW Transformer	N Parkway - Renner	2
Enterprise - Martin Lake/Trinidad - Stryker Creek	Nacogdoches 345/138	2
Sandow -Austrop	Austrop Auto	2
Stryker Creek - Trinidad	Martin Lake - Tricorner	2
Temple - Lake Creek/Tradinghouse	Ballinger - Paint Rock	2
Tricorner -Watermill/Trinidad	Seagoville - Kleberg Tap	2

Note: 1 day= units procured during any time period within one trade day. Total numbers of 1 day or less of local congestion management are not shown in the graph. Occurrences of 1 day or less are not listed in table but are totaled in graph.

### CSC Congestion Management

Instances of CSC congestion





## Notable Events

### **New Procedures/ Forms/ Operations Bulletins**

Power Operations Bulletin 75	Hotline Call for Portal Outages longer than 15 minutes. (Supervisor)
Power Operations Bulletin 76	Added guidance for creating an estimated end time for a forced outage and updated language for PRR 4425. (Transmission)
Power Operations Bulletin 77	Allows for approved outages to be temporarily interrupted. (Transmission)
Power Operations Bulletin 78	Coordinating rating changes and monitoring CSC limits. (Supervisor)
Power Operations Bulletin 79	Coordinating rating changes and monitoring CSC limits. (Transmission)
Power Operations Bulletin 80	OOME off line instructions for combined cycle units. (Transmission)

### **Security Alert Stage/ Threatcon/ Related issues**

Security Threat Alert Yellow (Elevated) maintained through April.

### **EECP Occurrence**

None

### **Major Weather Related Power System Problems**

None

### **Major system Voltage problems**

None

### **OCN, Advisory, Alert, Emergency Notice and Major Disturbances**

4/01 14:57	Transmission Alert for Leon Creek – Pleasanton.
4/06 12:00 to 17:00	OCN issued for severe weather in the Coast Zone.
4/15 14:35	Transmission Alert for Lake Creek - Temple
4/21 06:55	Transmission Alert for North Parkway – Renner.
4/26 16:03	Transmission Alert for Ben Davis – Allen Switch
4/29 11:30	Transmission Alert for Flatonia 13/69 kV Transformer.
4/30 16:50	Transmission Alert for Ben Davis – Allen Switch.

**Significant Communication Problems**

None

**Major Computer System Problems/Fixes**

None

**Load Shed incidences**

None

**Update on New Generation**

None

**Max / Min Temperature**

Max: 88.5°F FW

Min: 36.2°F W

**New SPS & RAP's**

None.

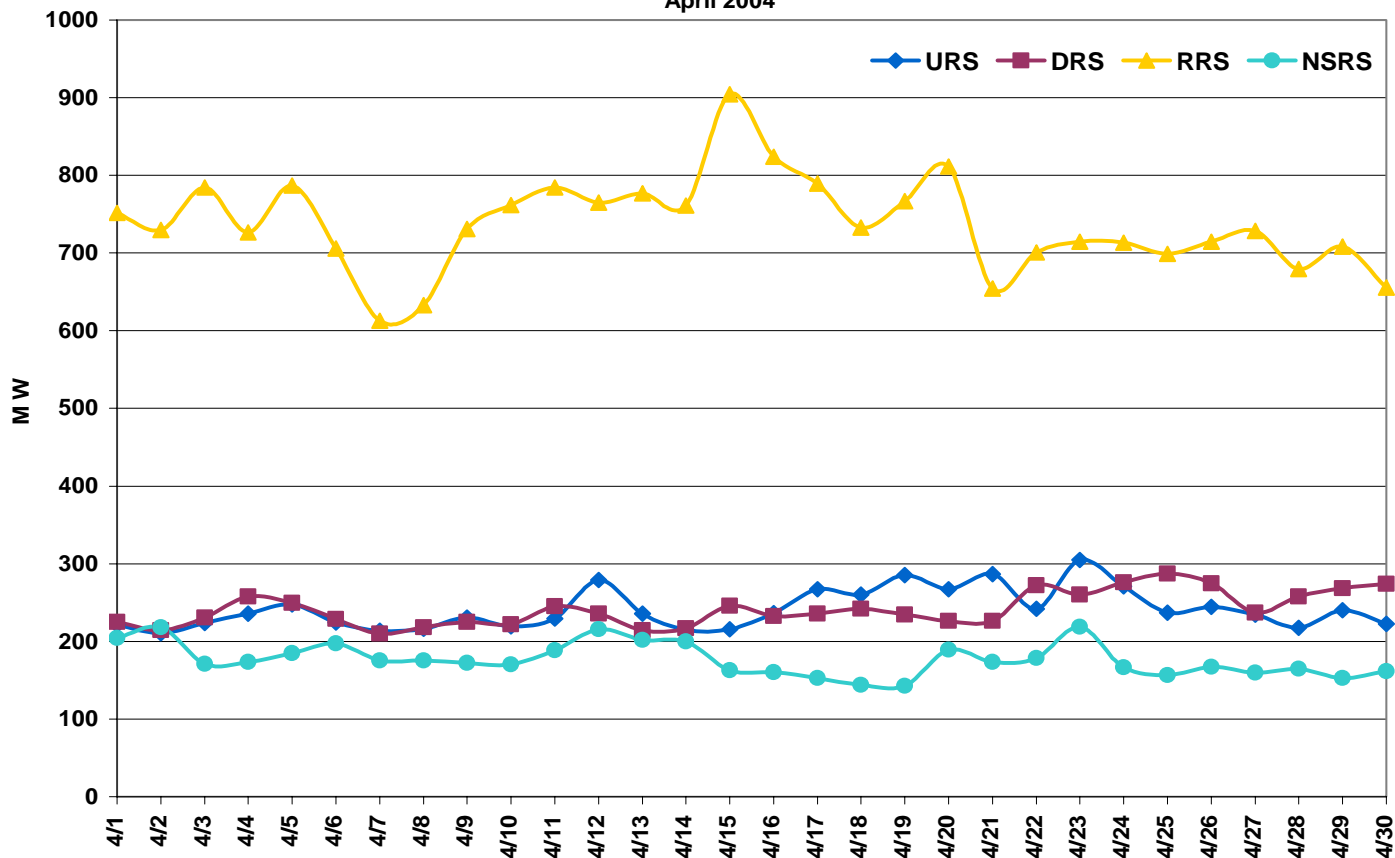
**Other**

None

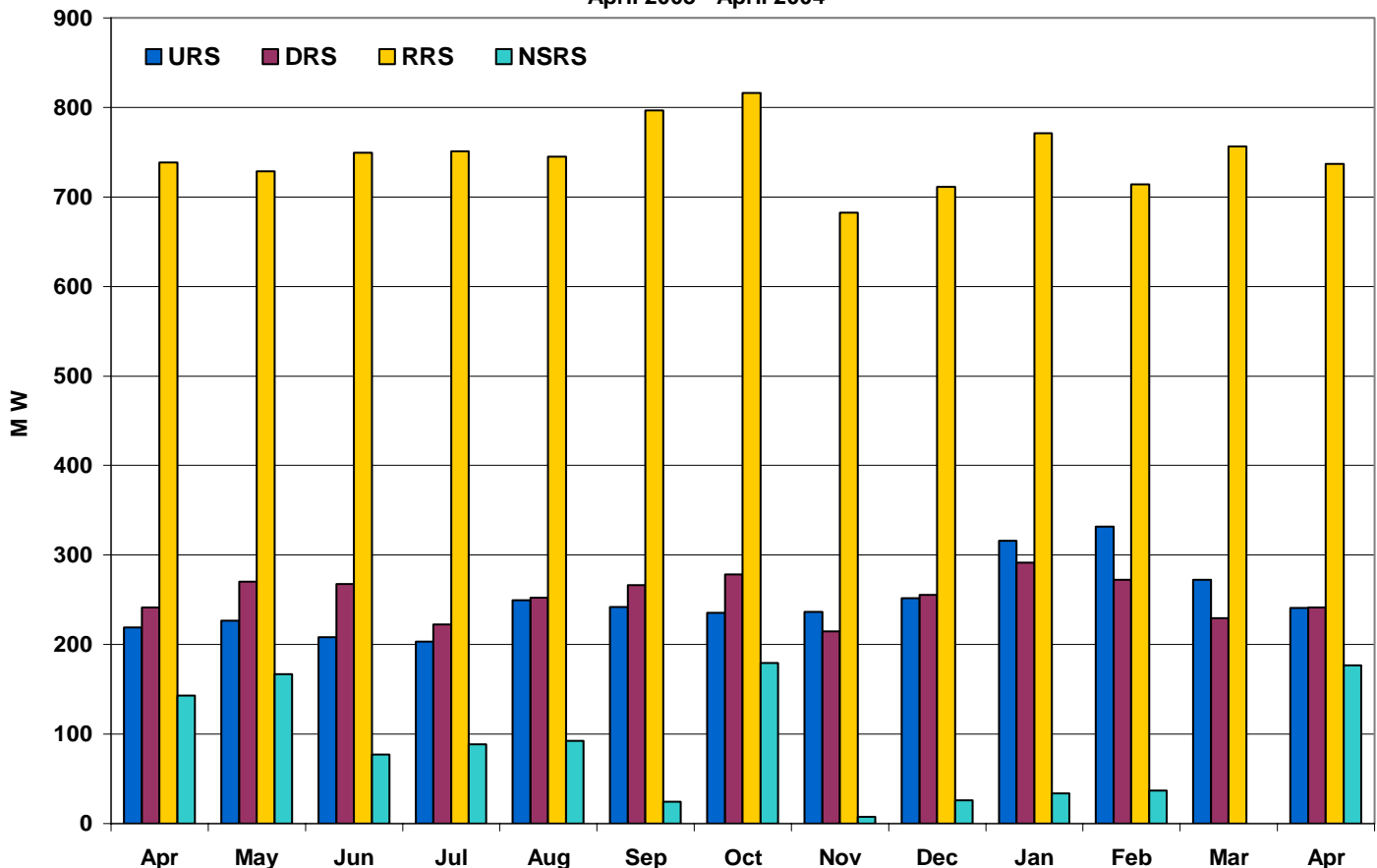
## Market Operation

## Ancillary Services

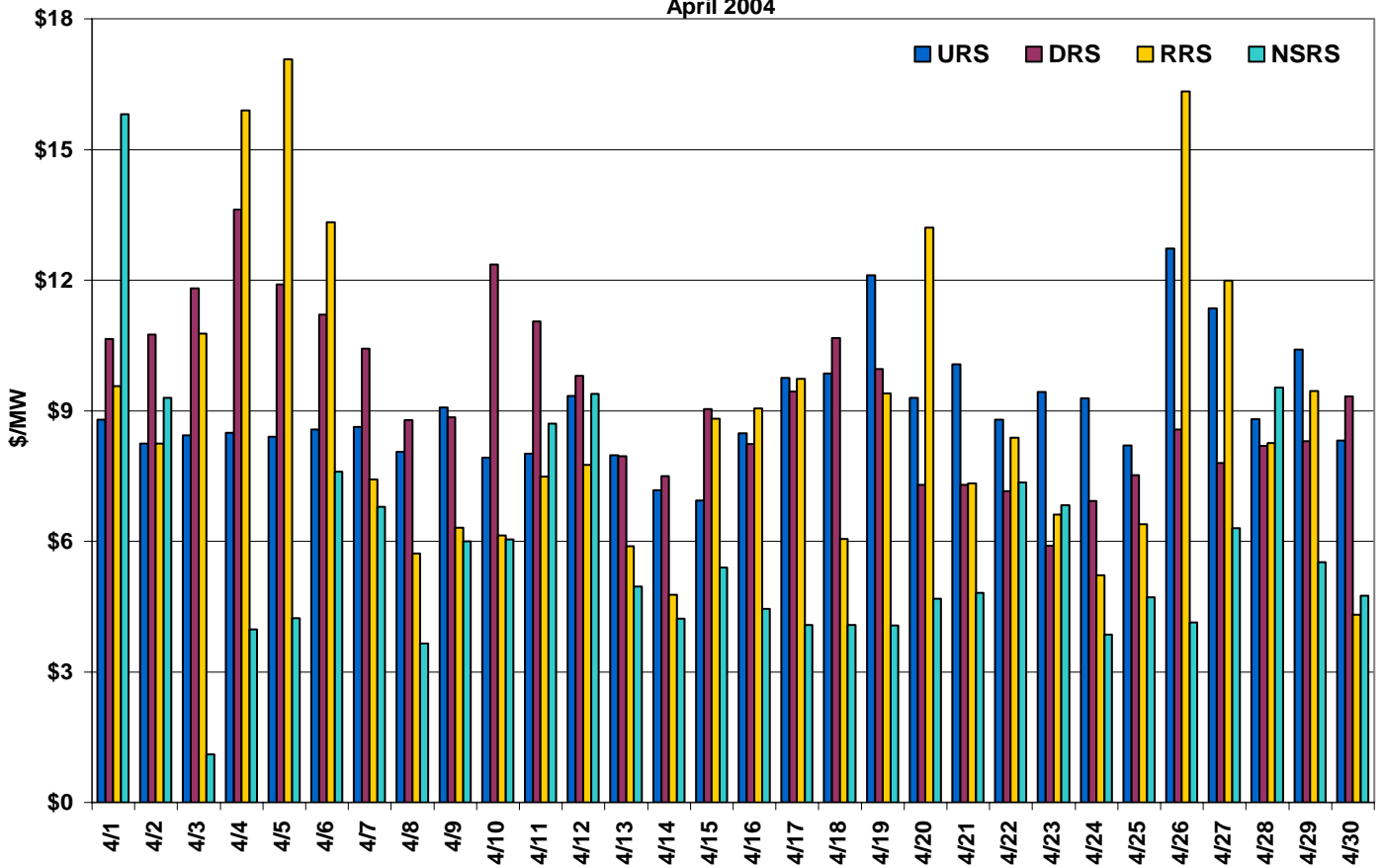
Average Hourly Procurement by Ancillary Service  
April 2004



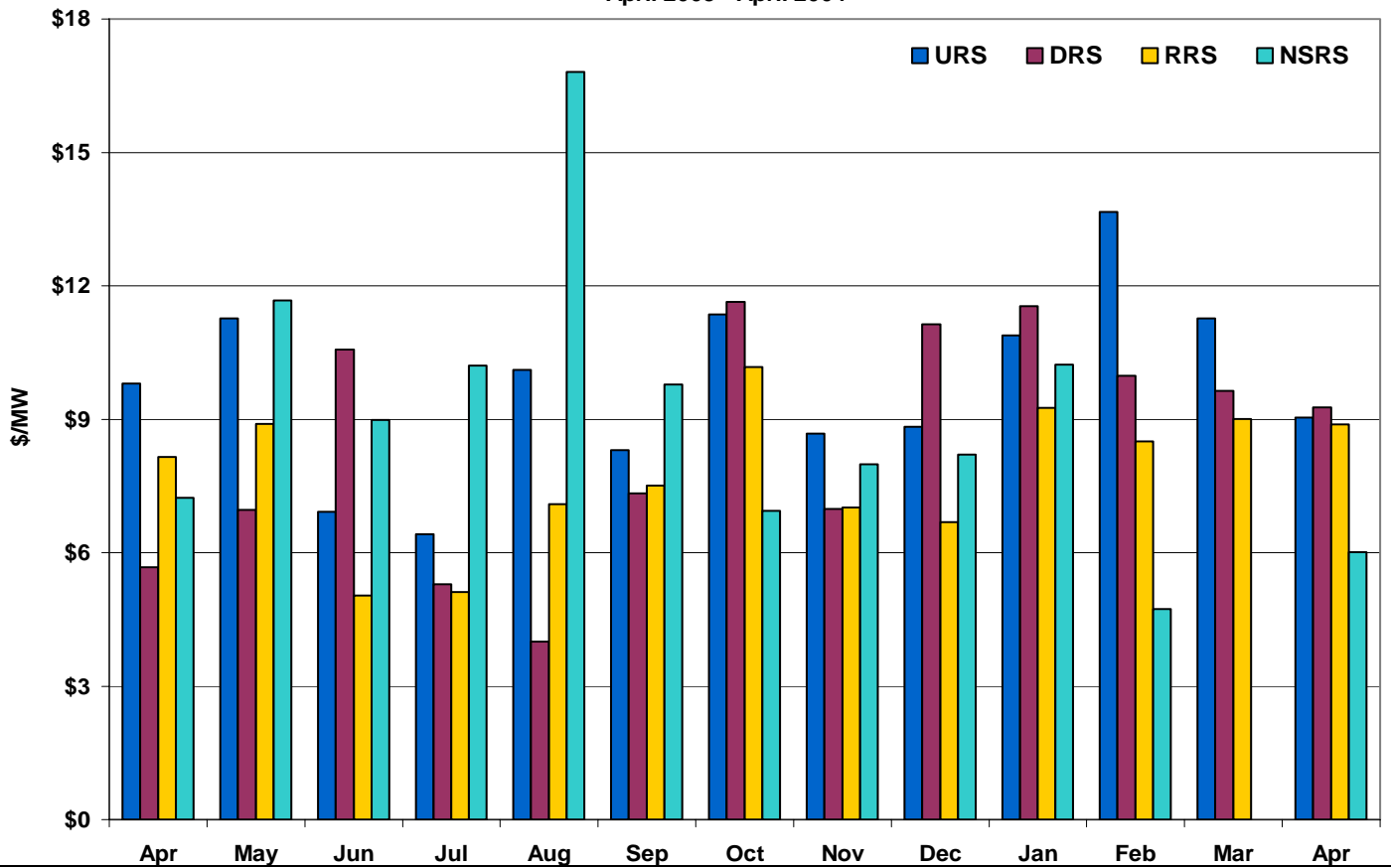
Average Hourly Procurement by Ancillary Service  
April 2003 - April 2004



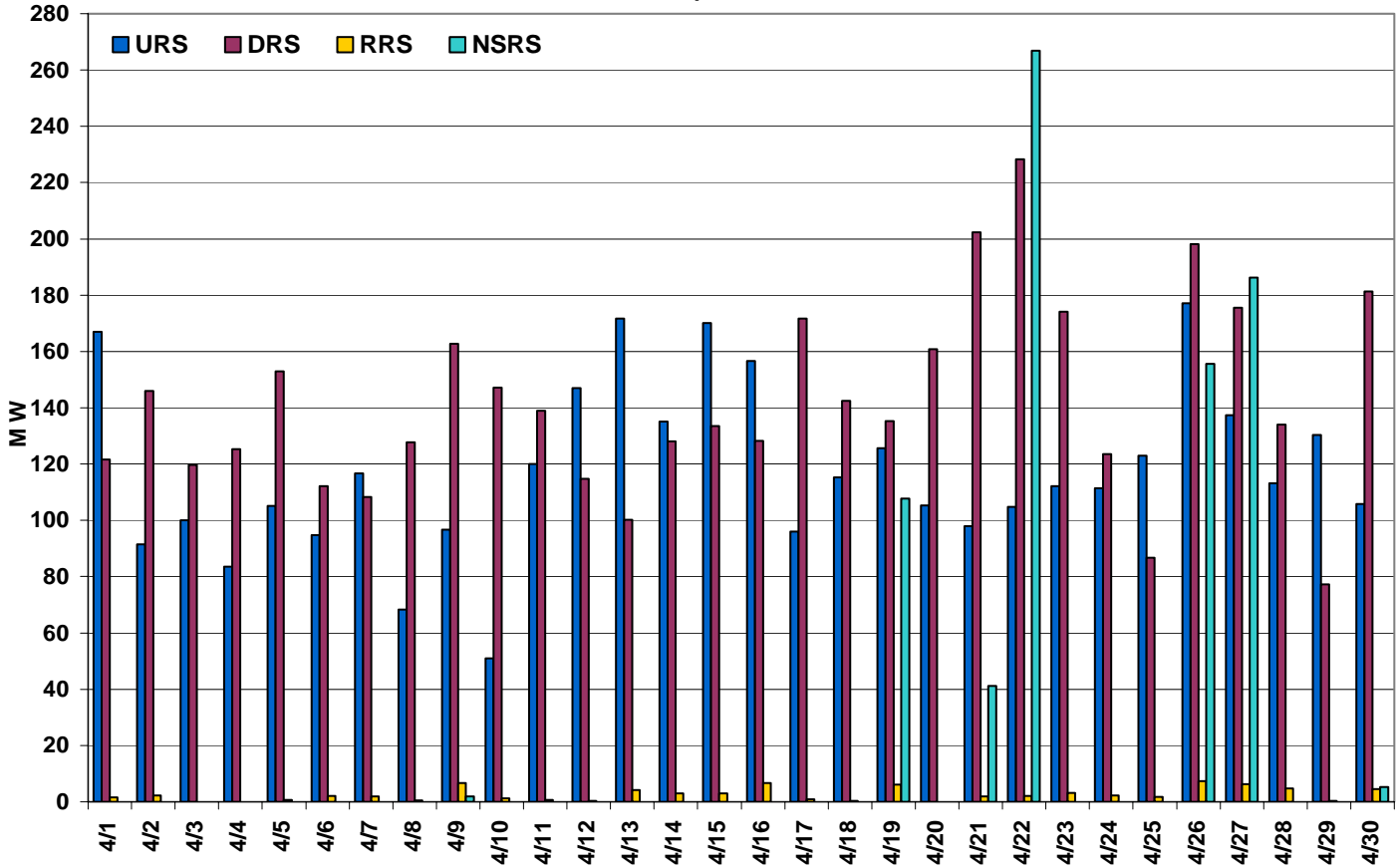
Average MCPC by Ancillary Service  
April 2004



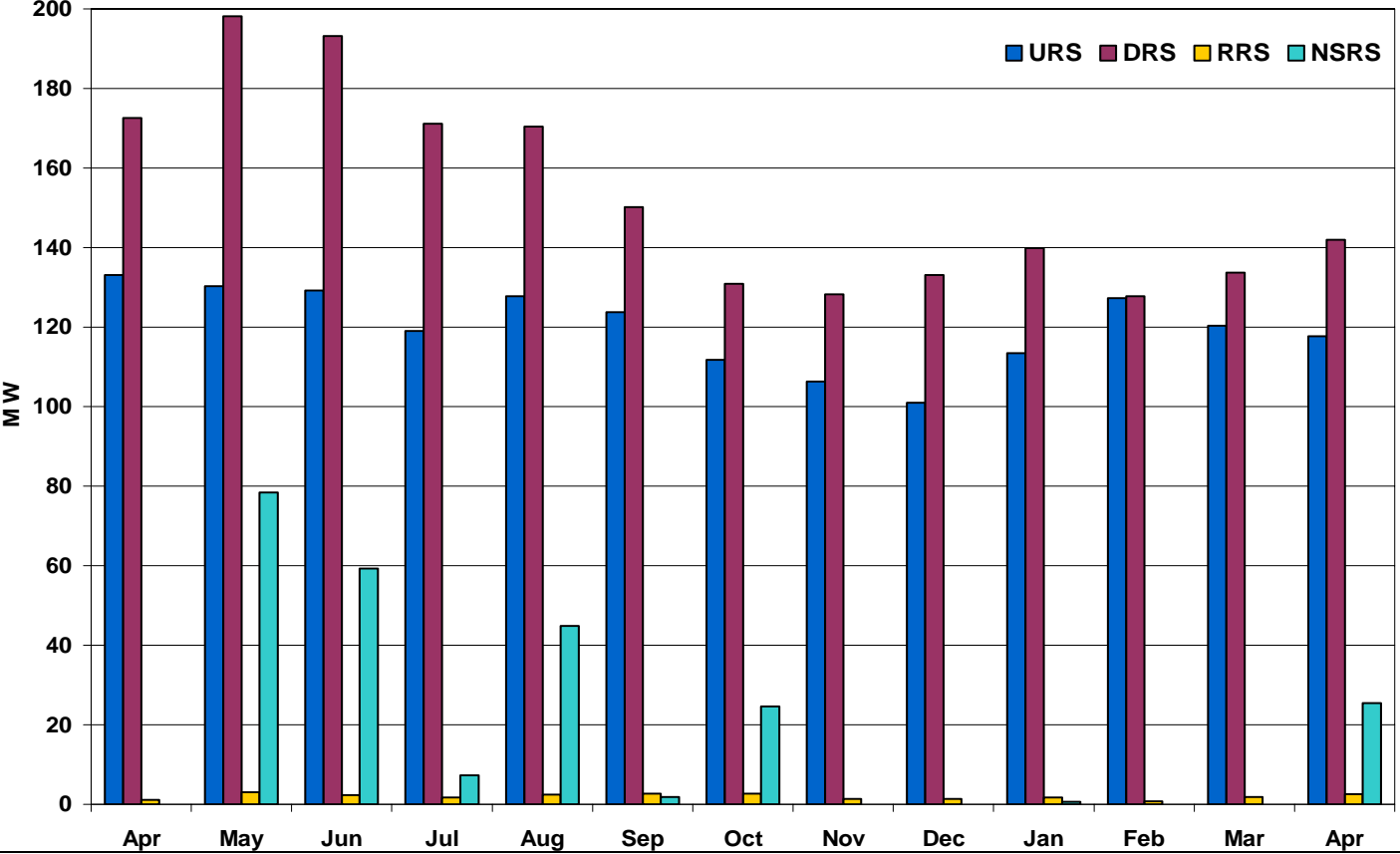
Average MCPC by Ancillary Service  
April 2003 - April 2004



Average Deployment by Ancillary Service  
April 2004

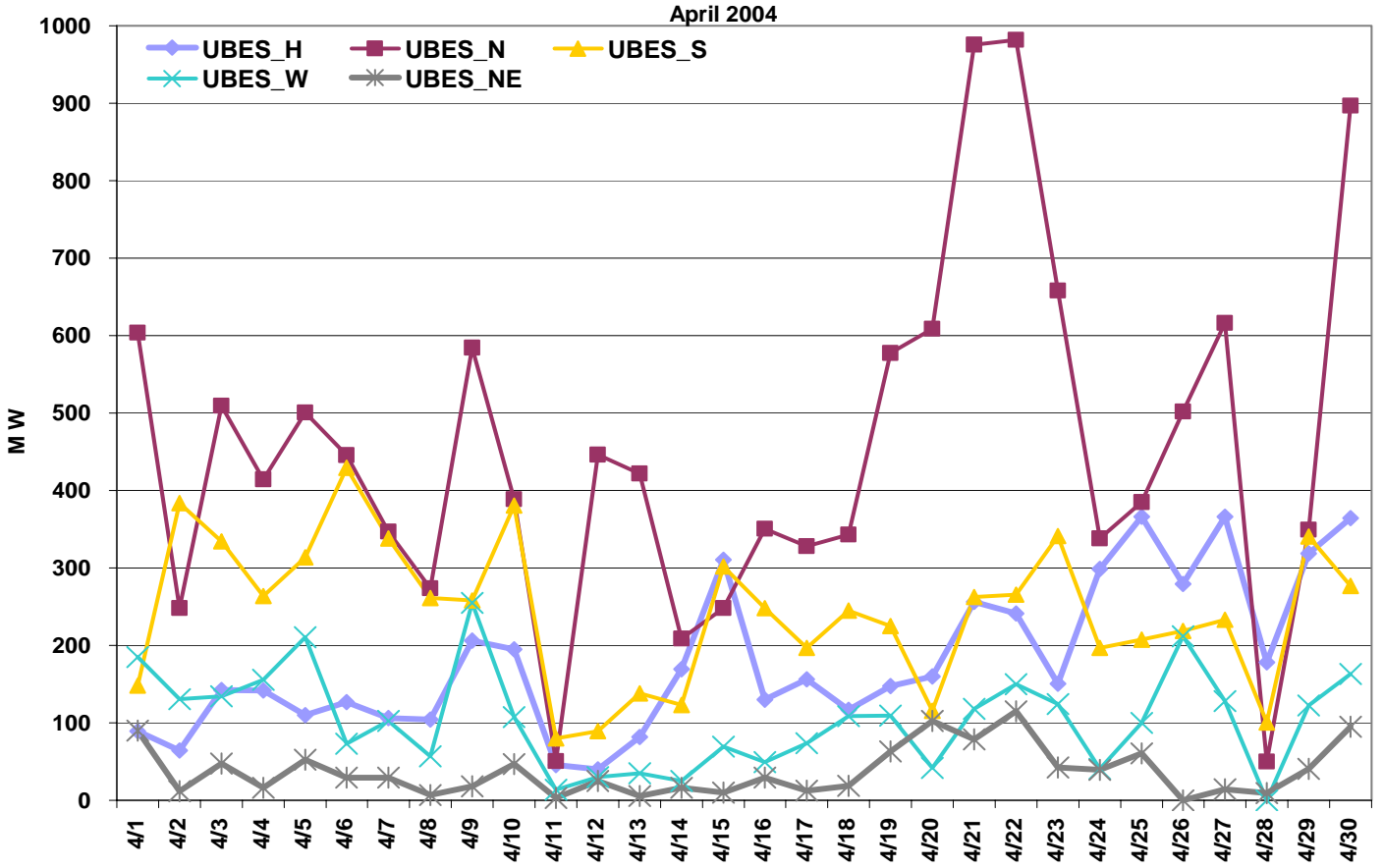


Average Deployment by Ancillary Service  
April 2003 - April 2004

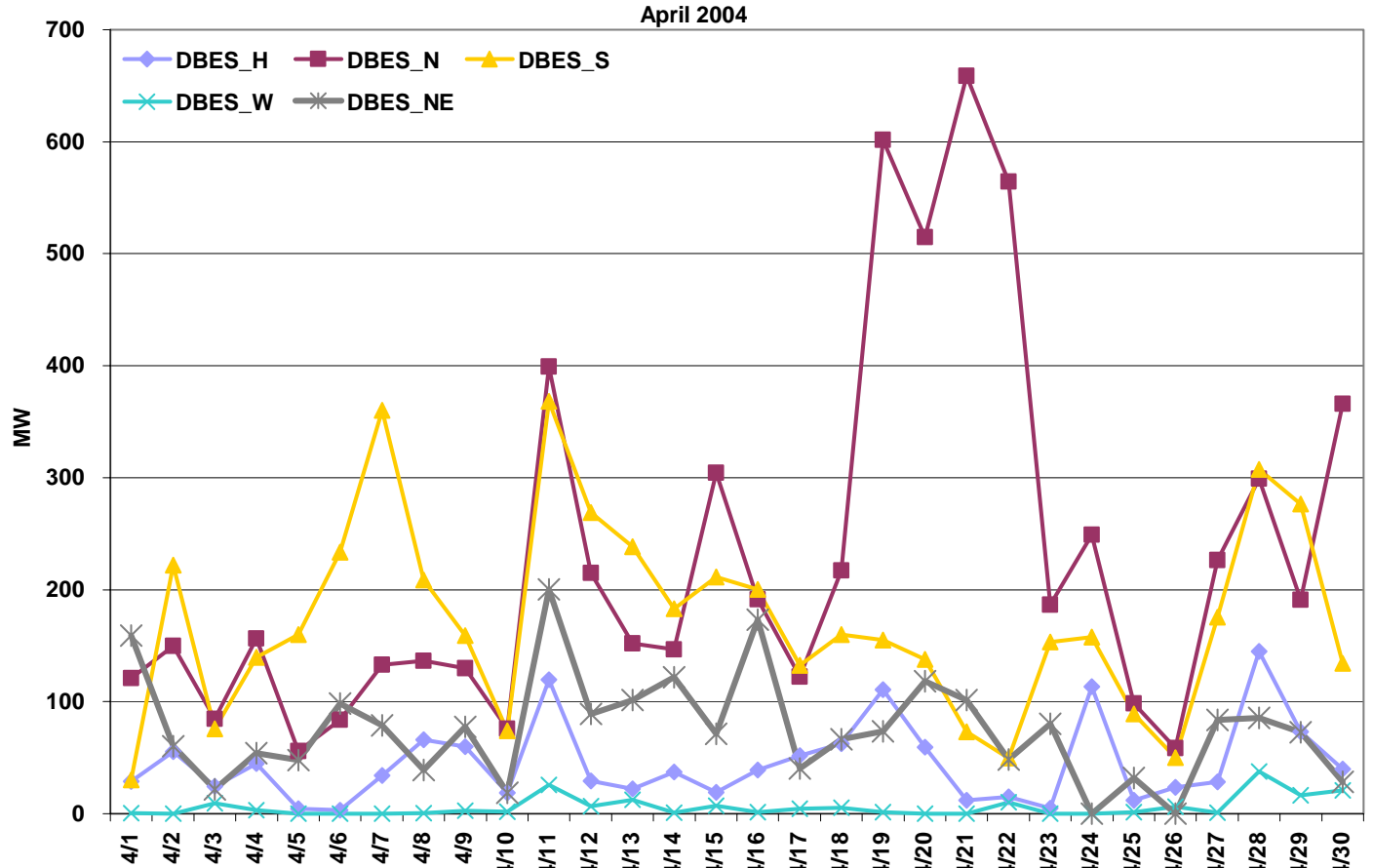


Balancing Energy  
**Average Balancing Energy Deployed**

Average UBES Deployment in Four Zones

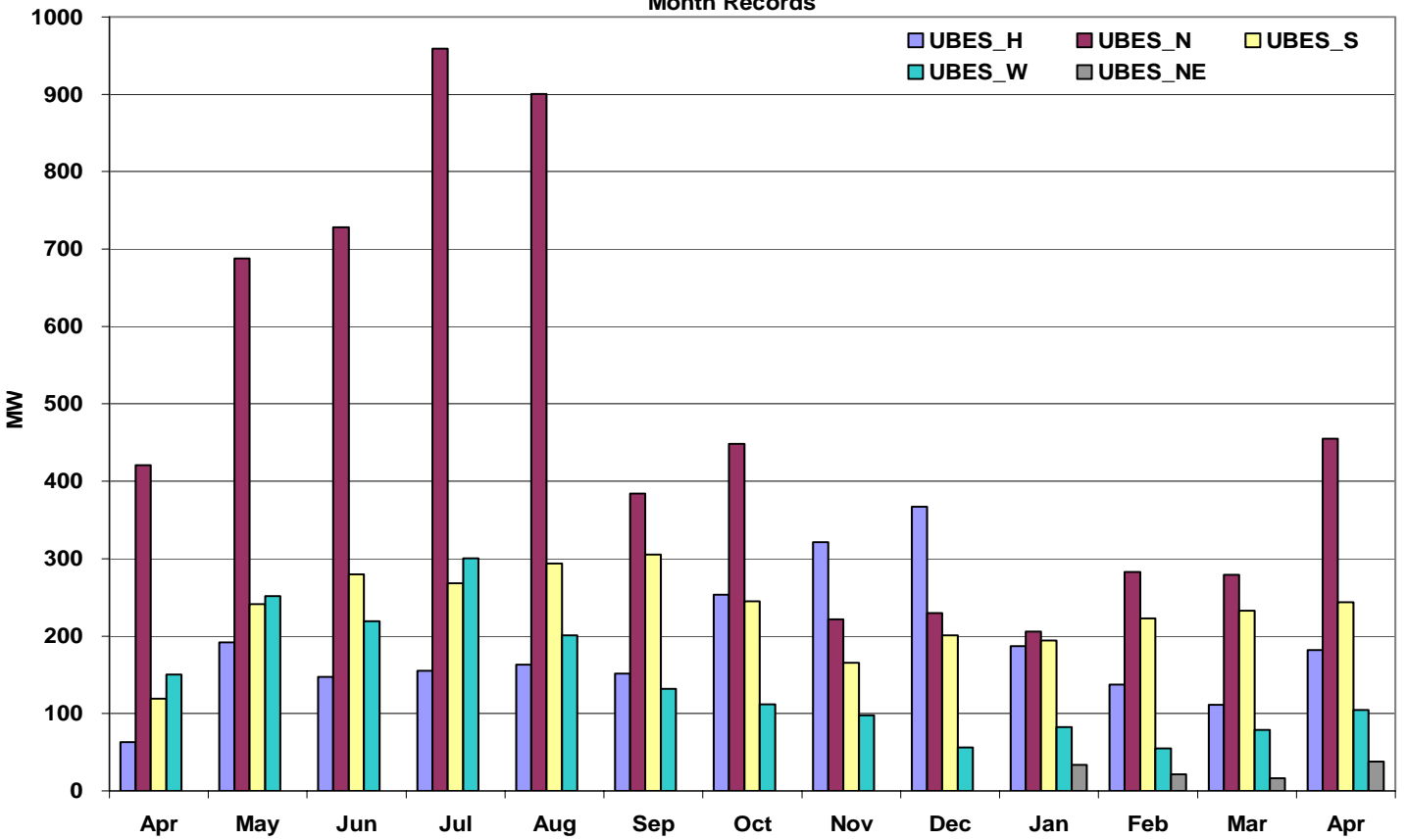


Average DBES Deployment in Four Zones

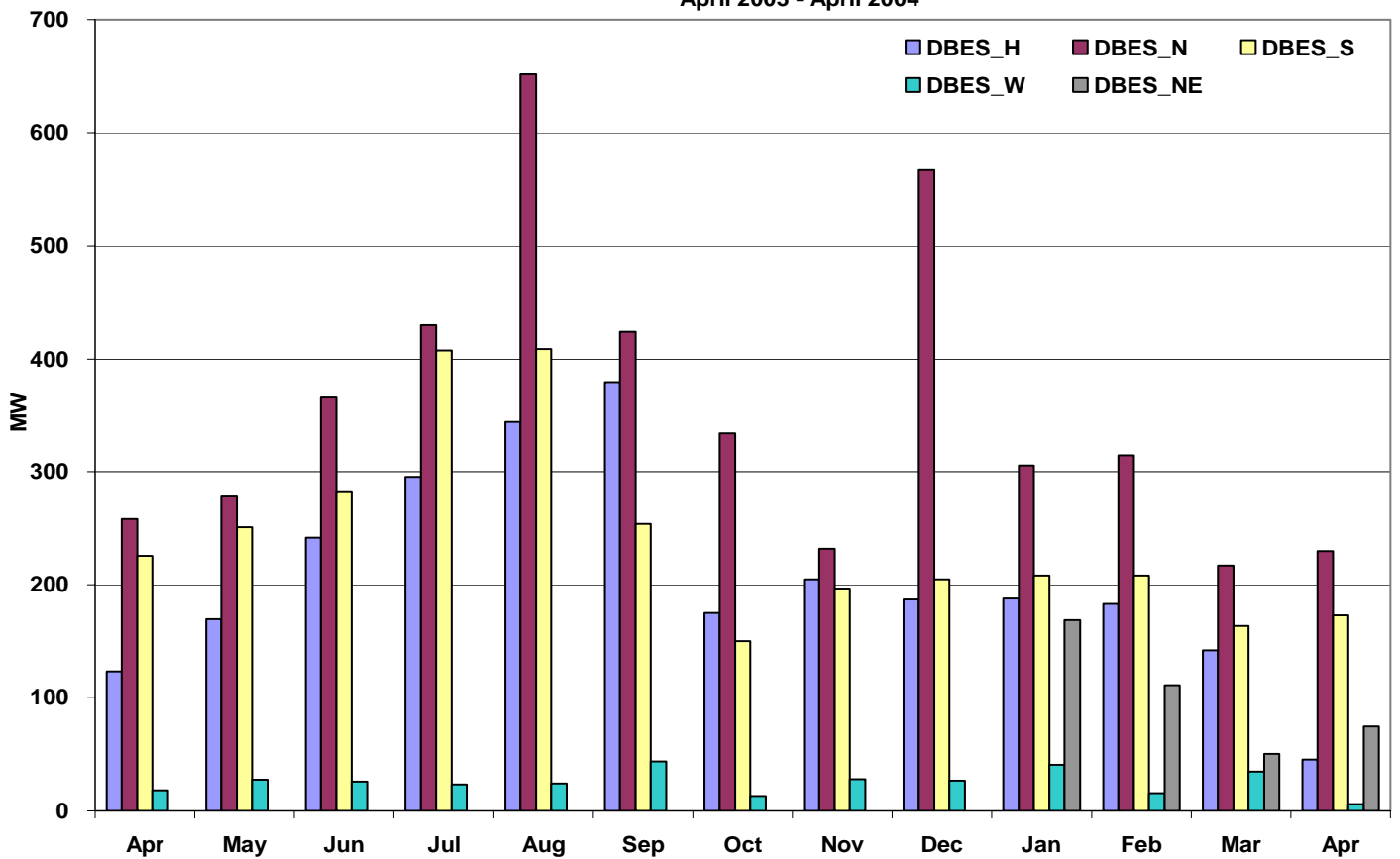




**UBES Deployment: Rolling 12 Month Records**

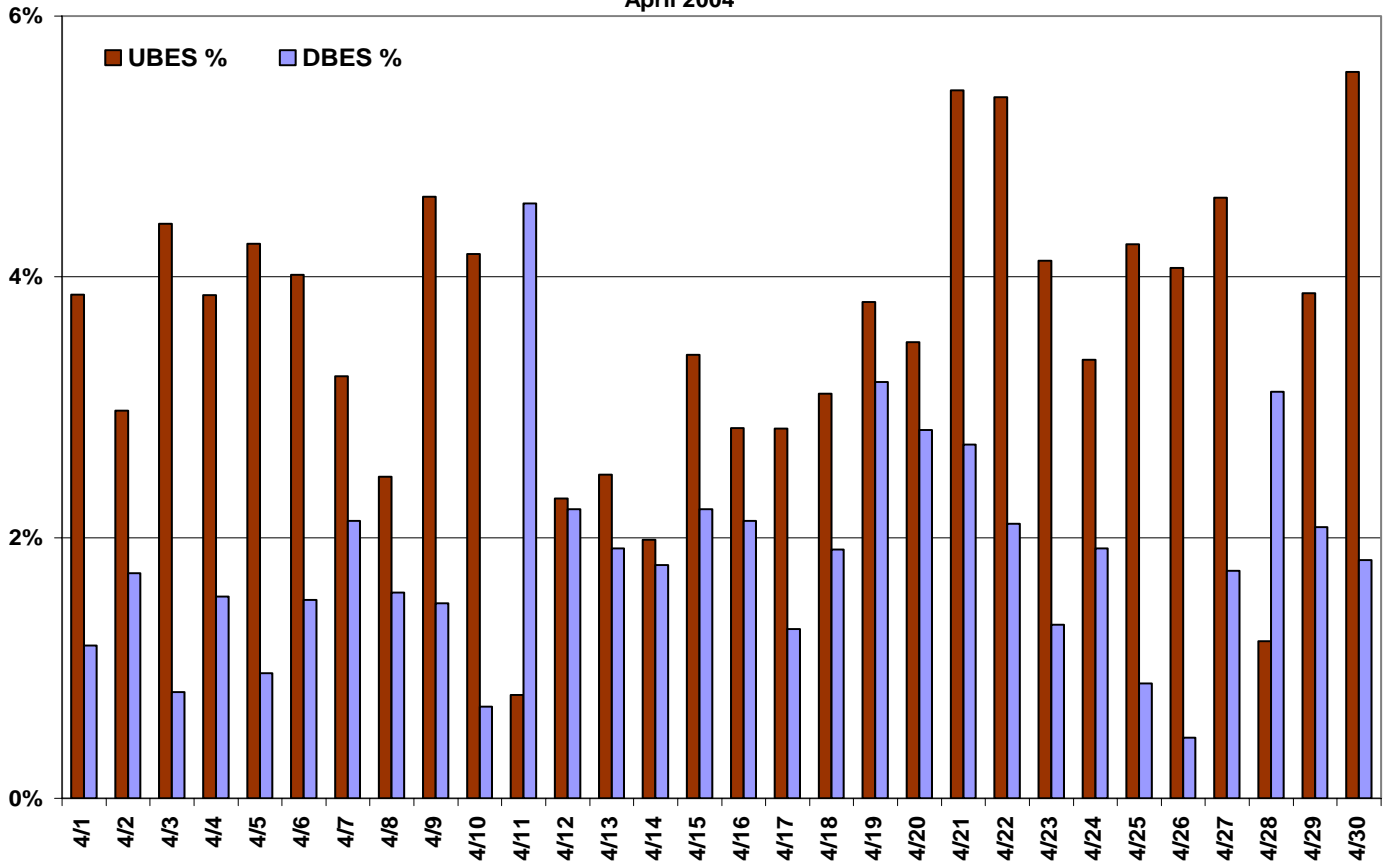


**DBES Deployment: Rolling 12 Month Records**  
April 2003 - April 2004

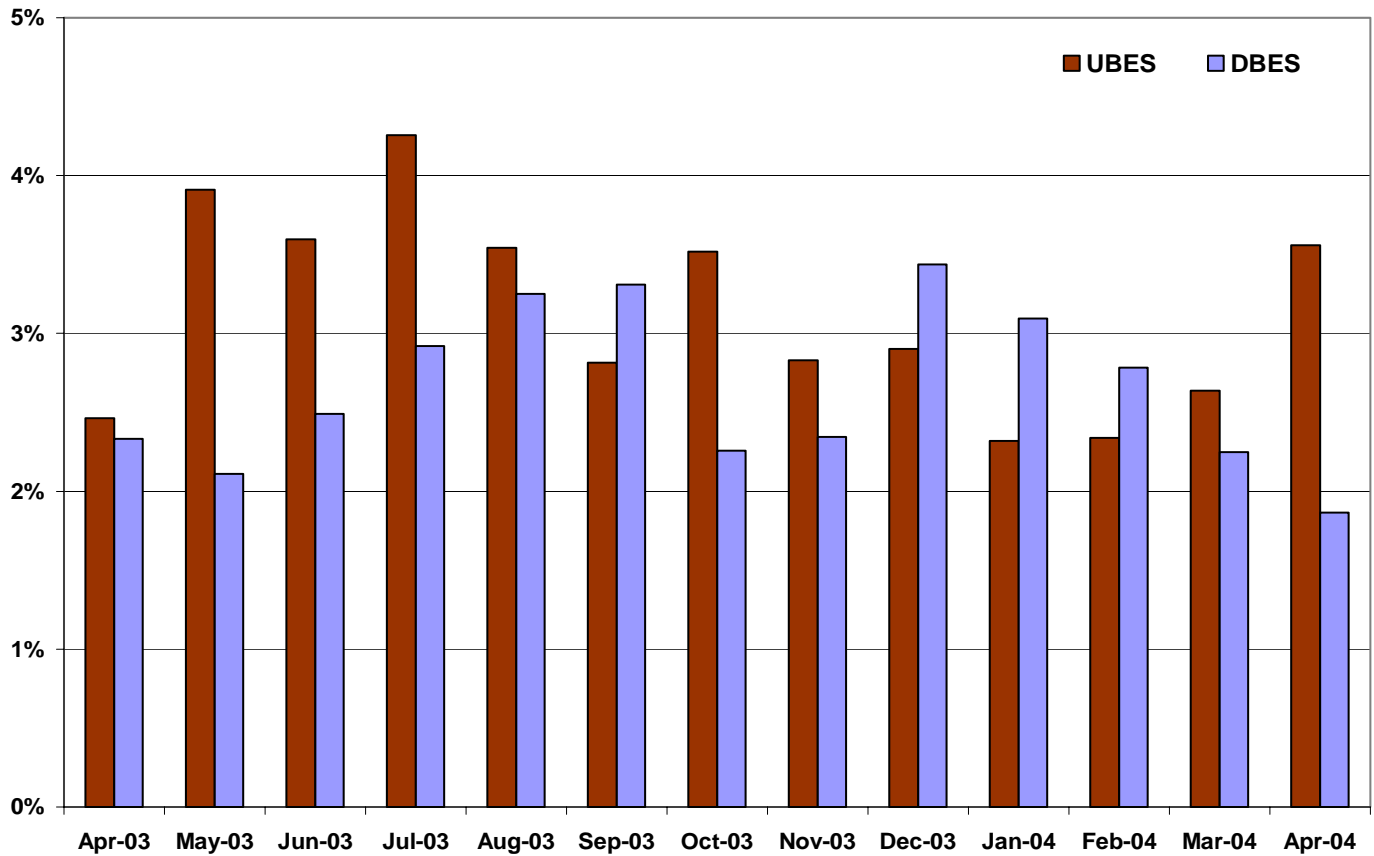


Balancing Energy  
**% of Total ERCOT Energy Requirement**

**Average BES Deployed: as A Percentage of Total Energy Requirement  
April 2004**



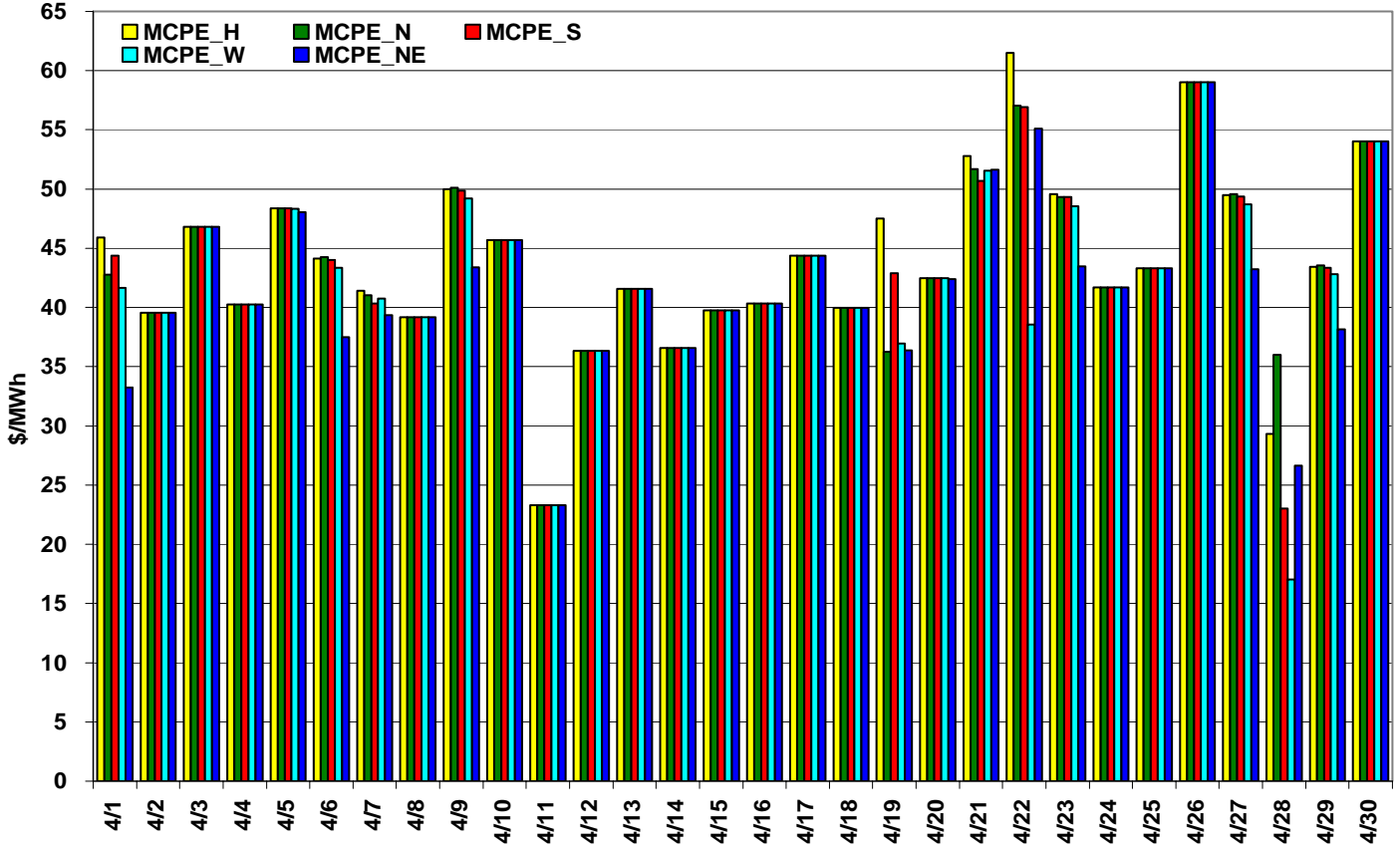
**Average BES Deployed: as A Percentage of Total Energy Requirement  
April 2003 - April 2004**



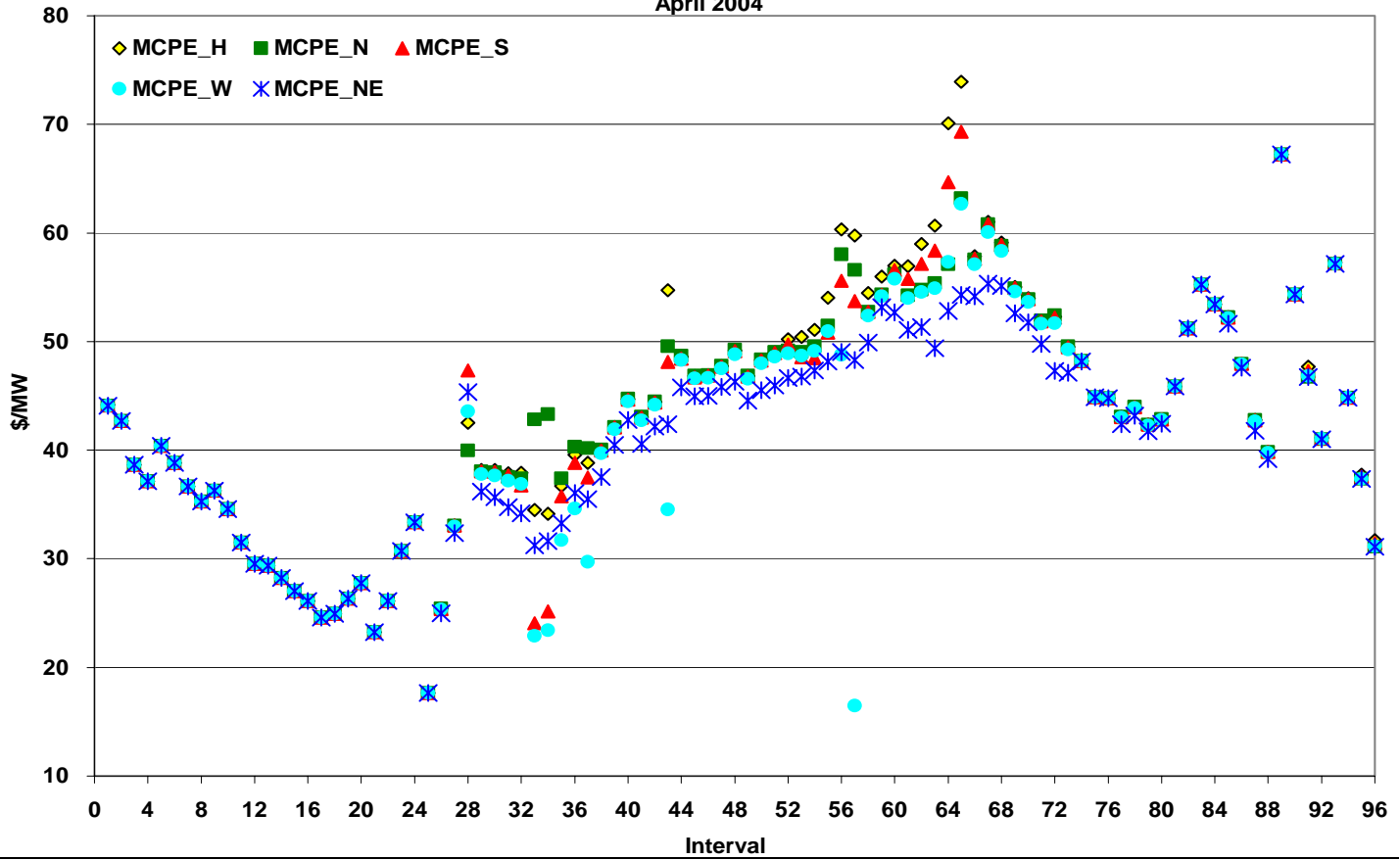
# Balancing Energy

## **Average MCPE**

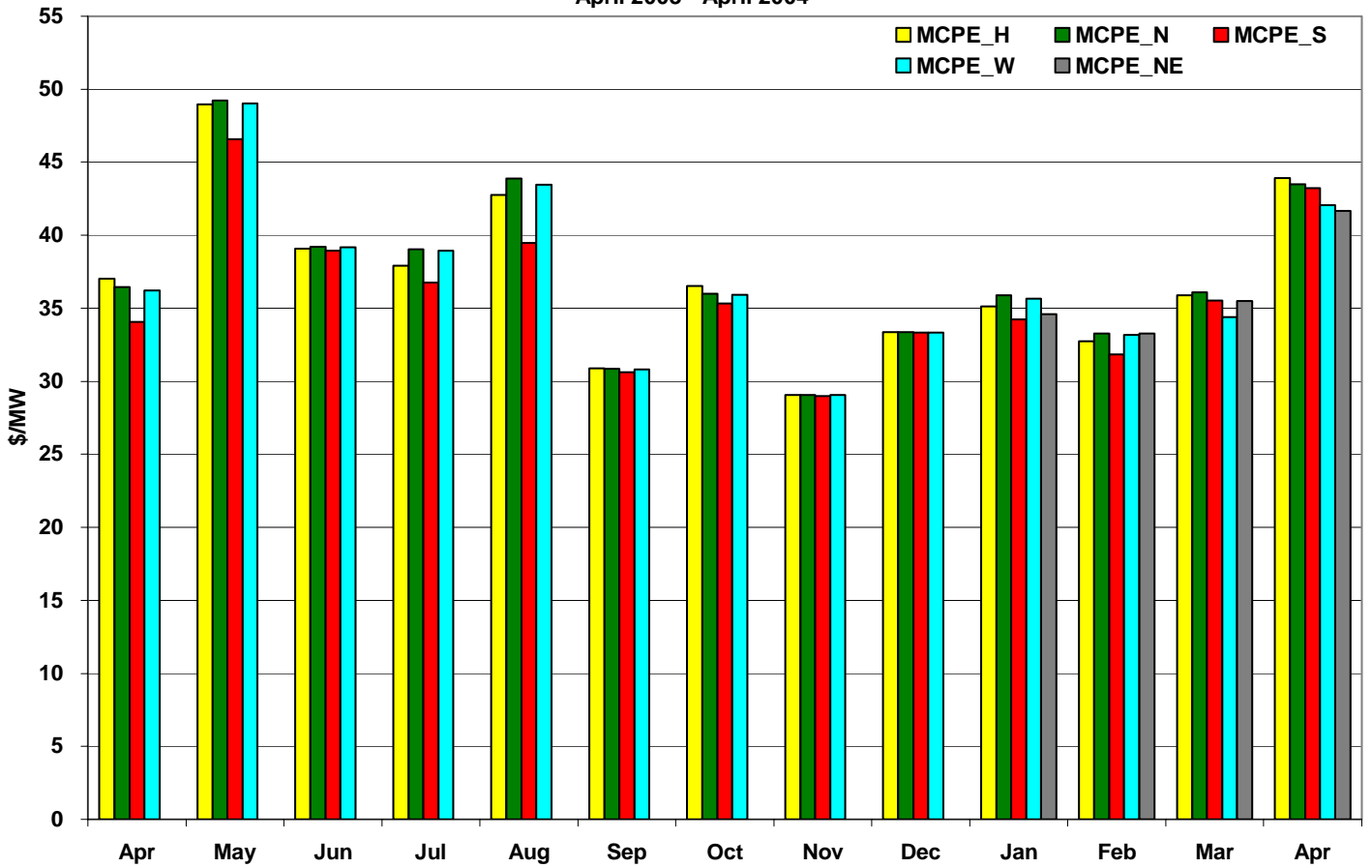
Average MCPE in Five Zones  
April 2004



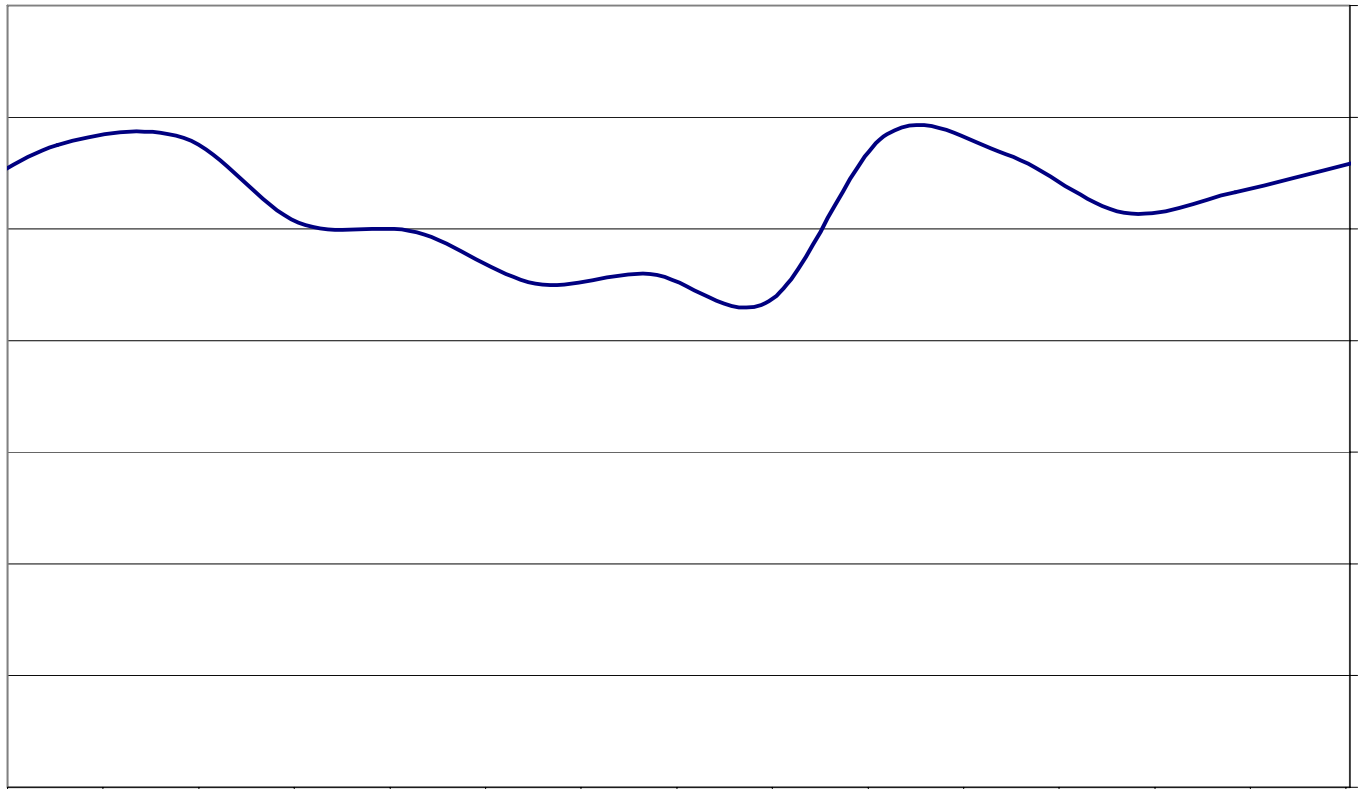
Average MCPE at Each Interval for Five Zones  
April 2004



**MCPE: Rolling 12 Month Records**  
**April 2003 - April 2004**



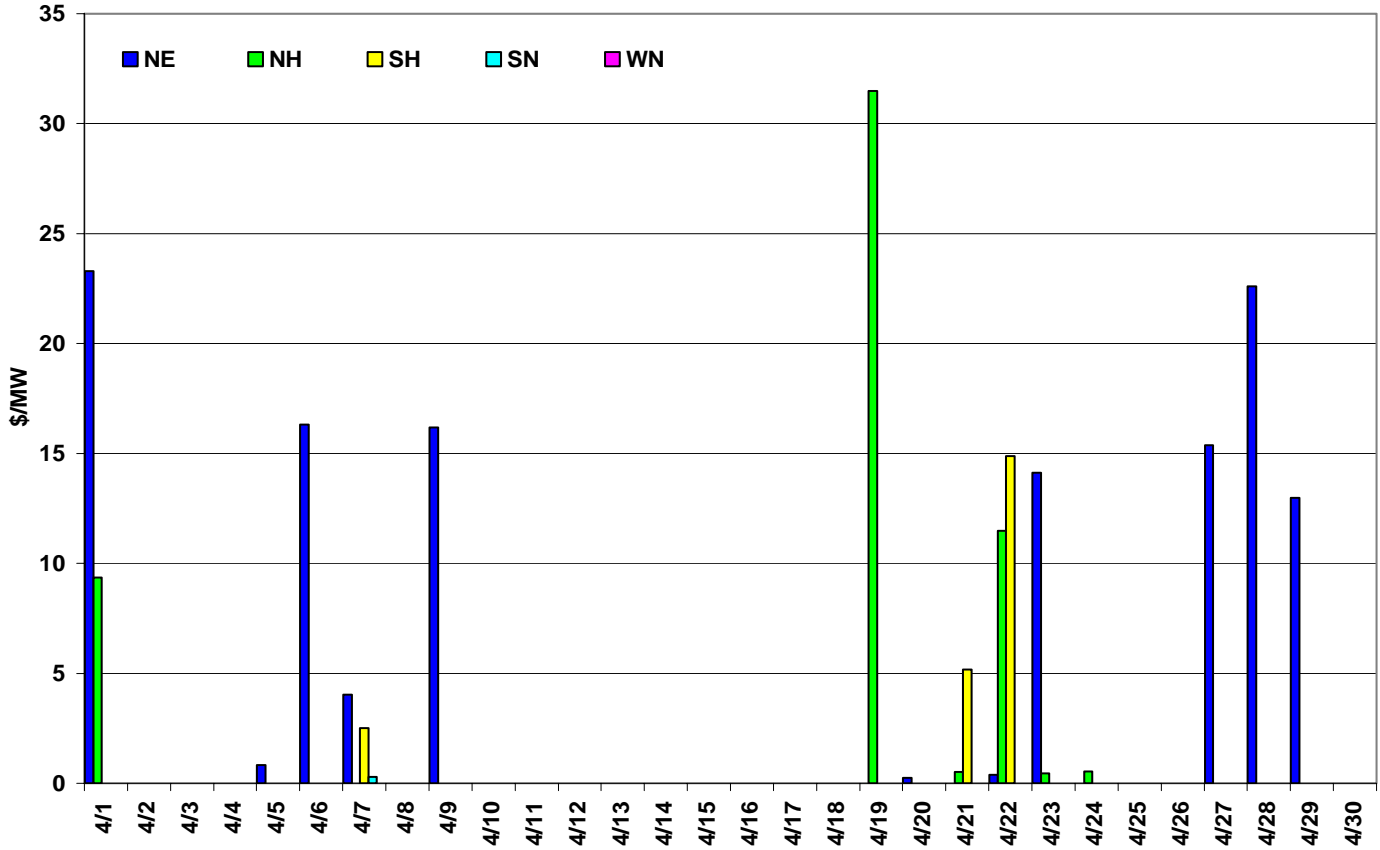
**Trend of Average Fuel Index**



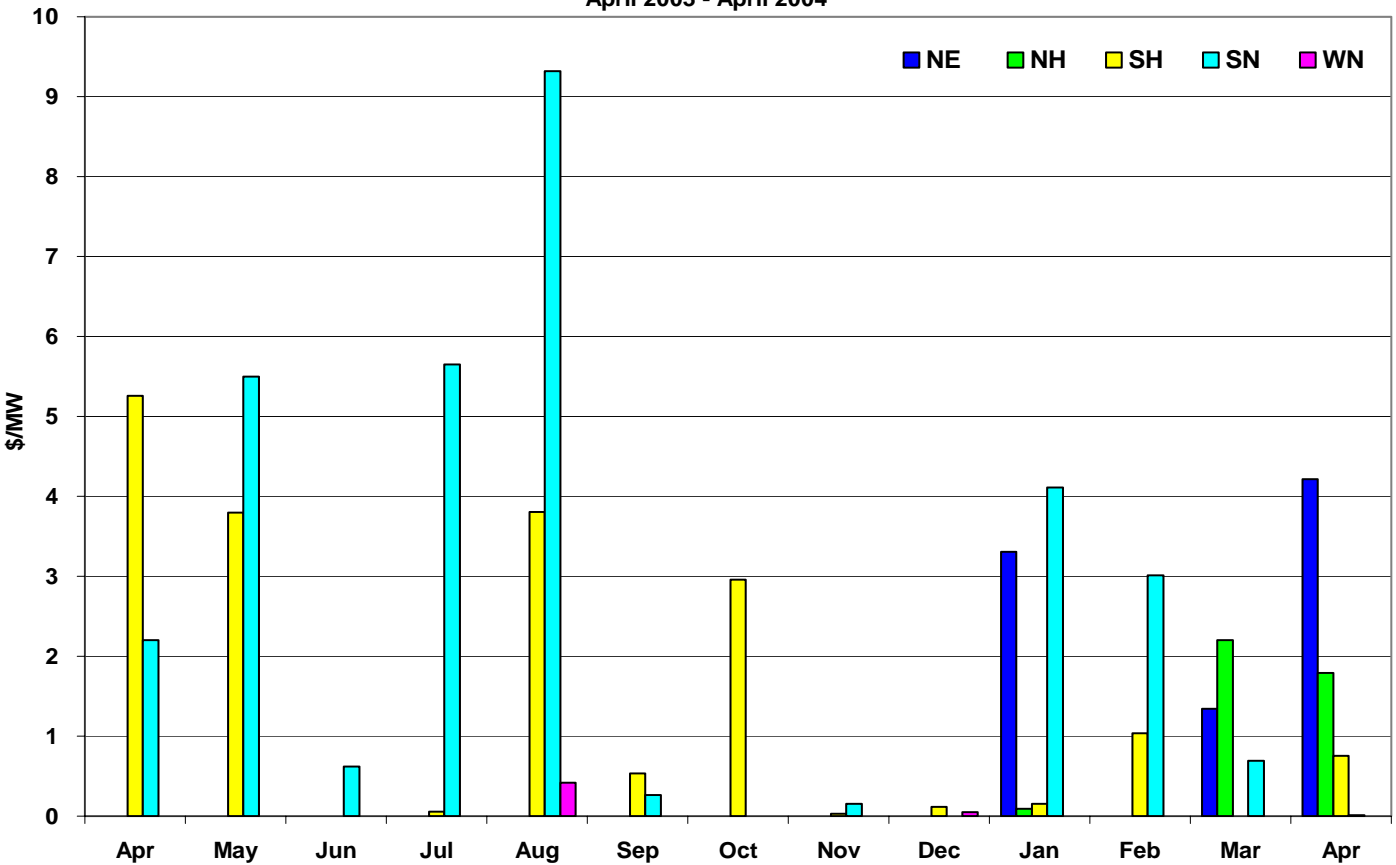
Apr-03 May-03 Jun-03 Jul-03 Jul-03 Aug-03 Sep-03 Oct-03 Nov-03 Nov-03 Dec-03 Jan-04 Feb-04 Mar-04 Apr-04

Balancing Energy  
**Average Shadow Price**

Average Shadow Price  
April 2004



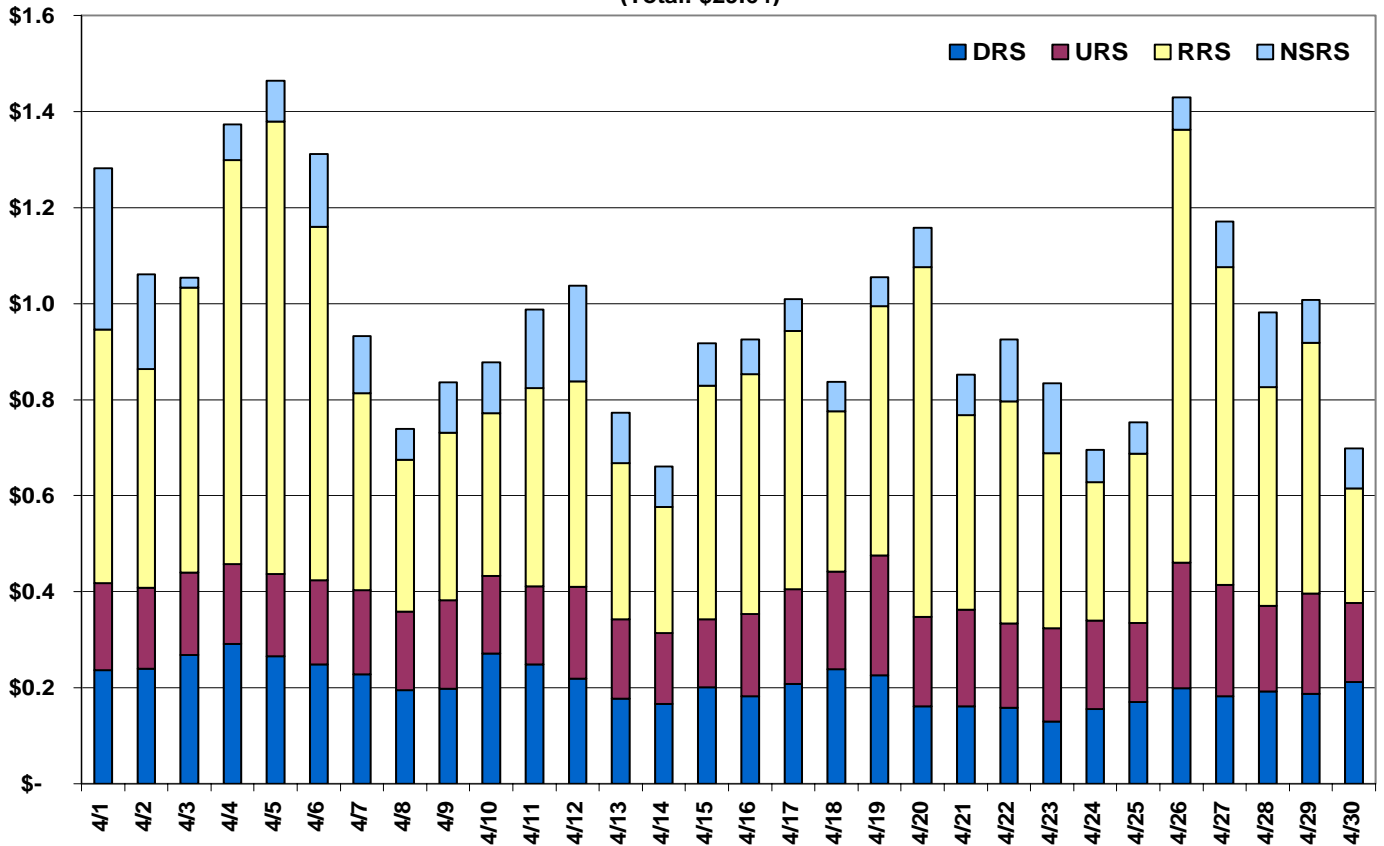
Average Shadow Price  
April 2003 - April 2004



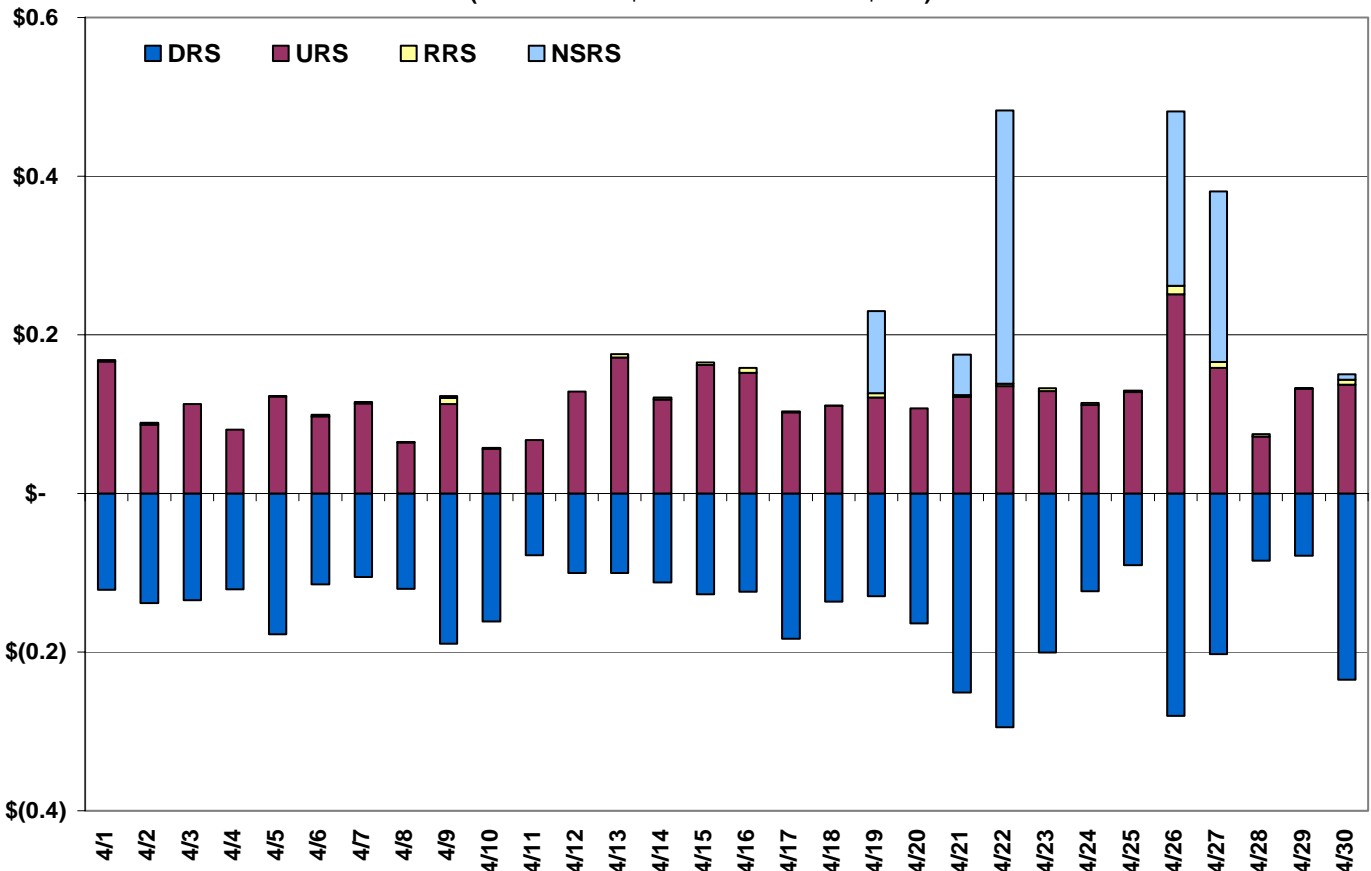


## Cost Summary

**Ancillary Service Capacity Cost (in Million \$)**  
(Total: \$29.64)

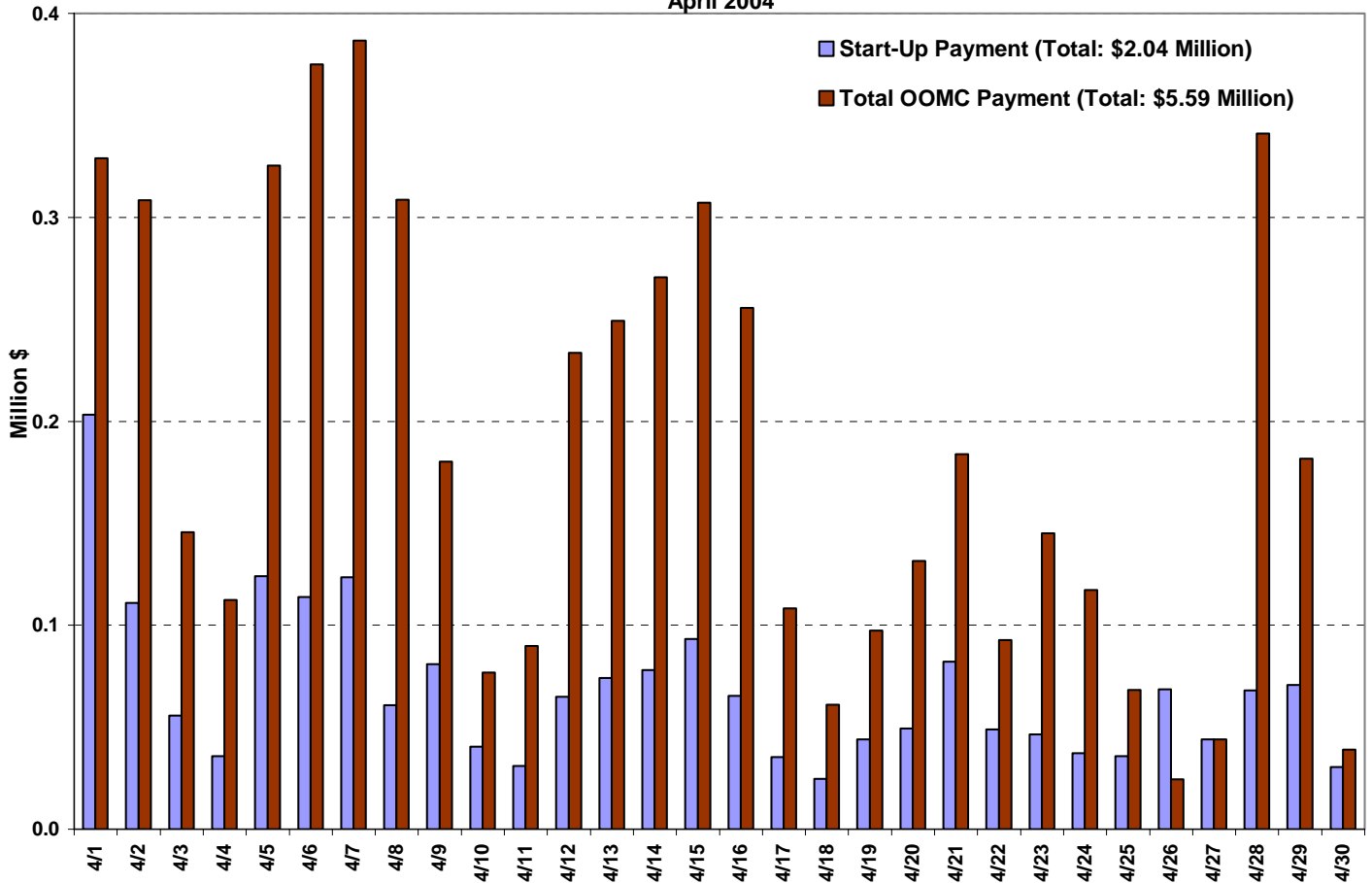


**Ancillary Service Deployment Cost (in Million \$)**  
(Total w DRS: \$ .17 Total w/o DRS: \$4.65)



Note: There is not a price for self-arranged Ancillary Services. MCPC is used to calculate the cost for self-arrangement.

**Estimated OOMC Cost At Final Settlement  
April 2004**

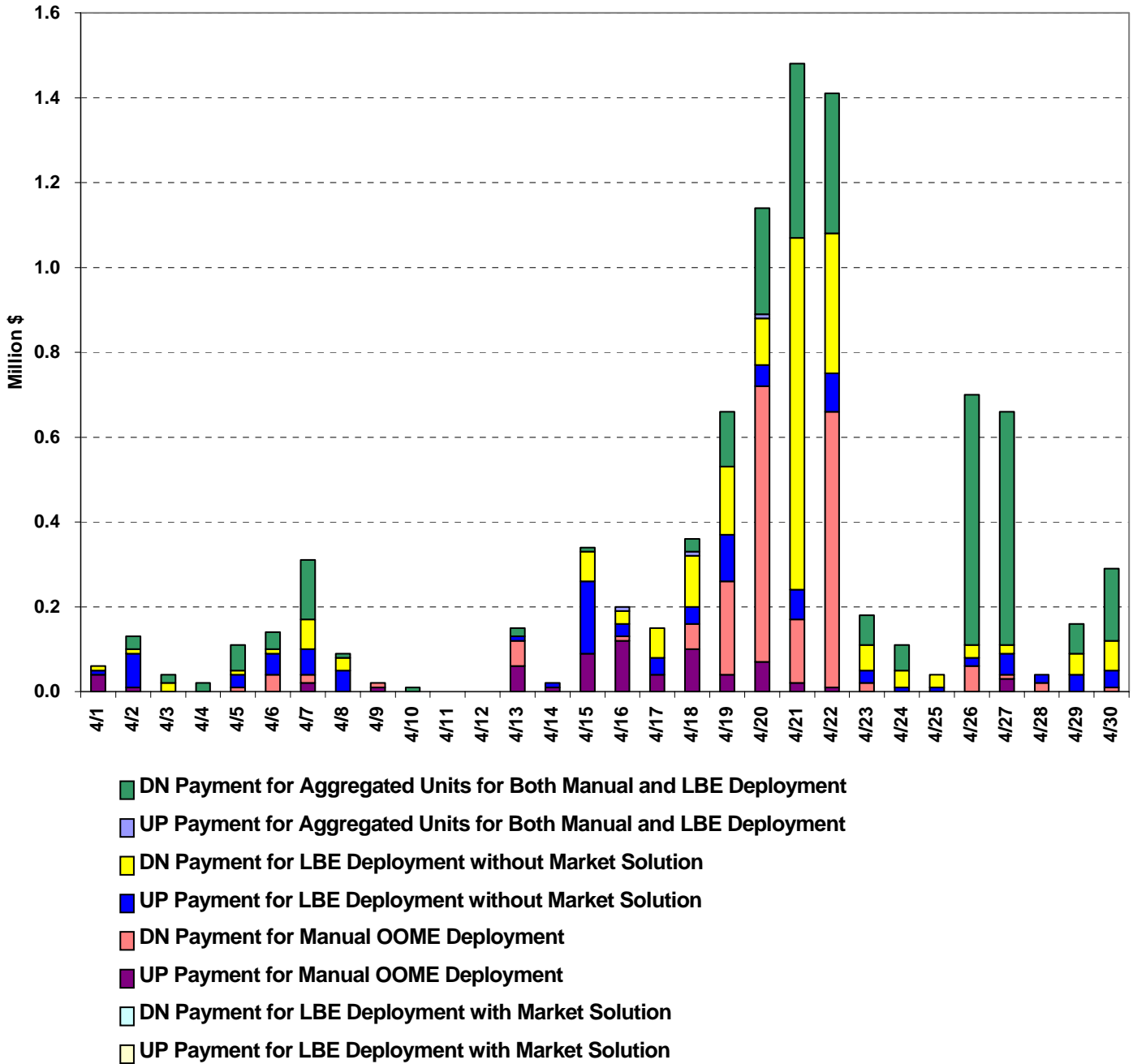


Note:

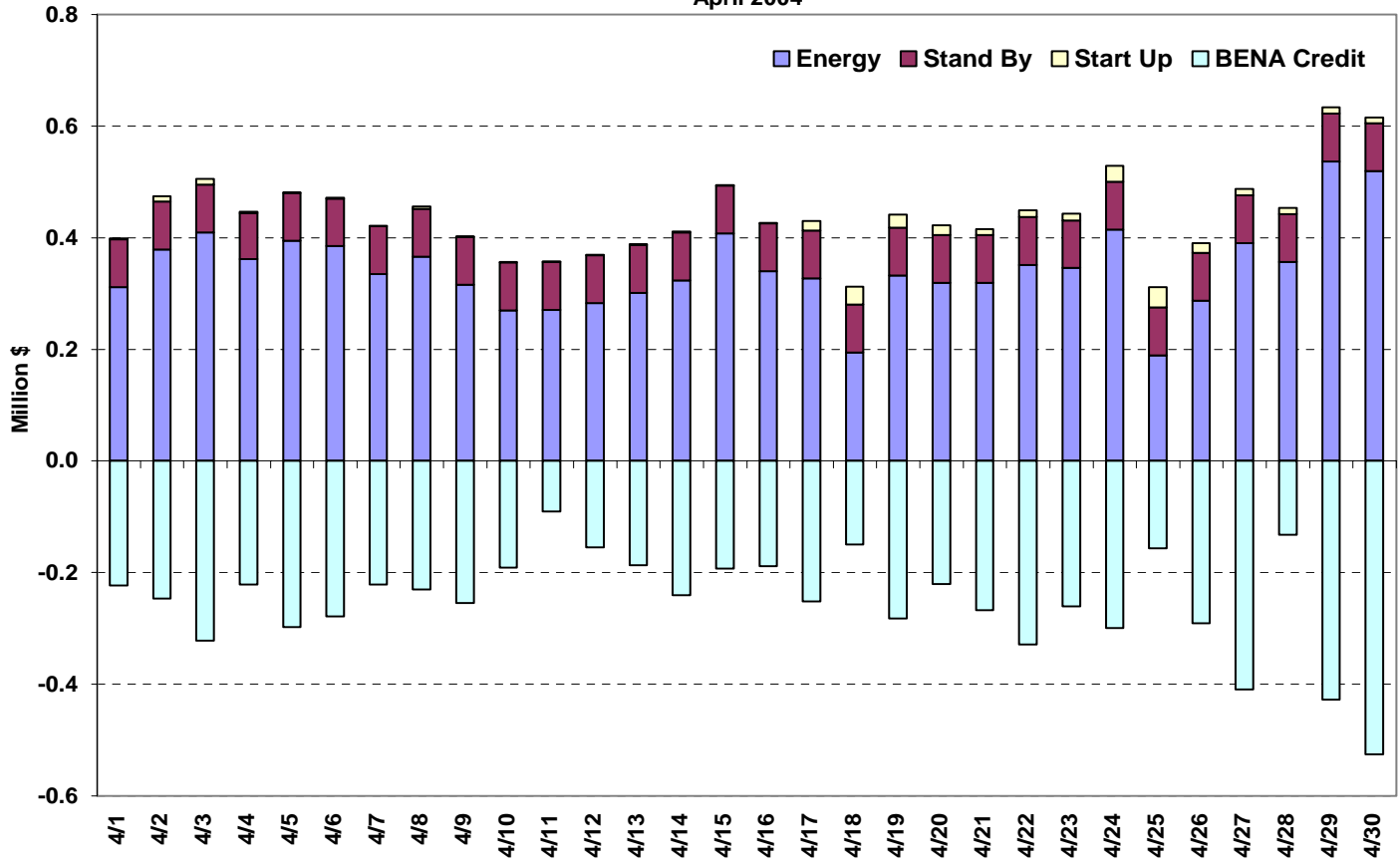
All OOMC'd units are paid Generic Start-Up Cost and Generic Operational Cost in Initial Settlement. The Start-Up payment for some units will be taken back in Final Settlement if those units did not have an actual startup.

OOMC Cost provided in this chart is an estimation because of the potential of disputes before Final Settlement. This chart will be updated after Final Settlement is completed.

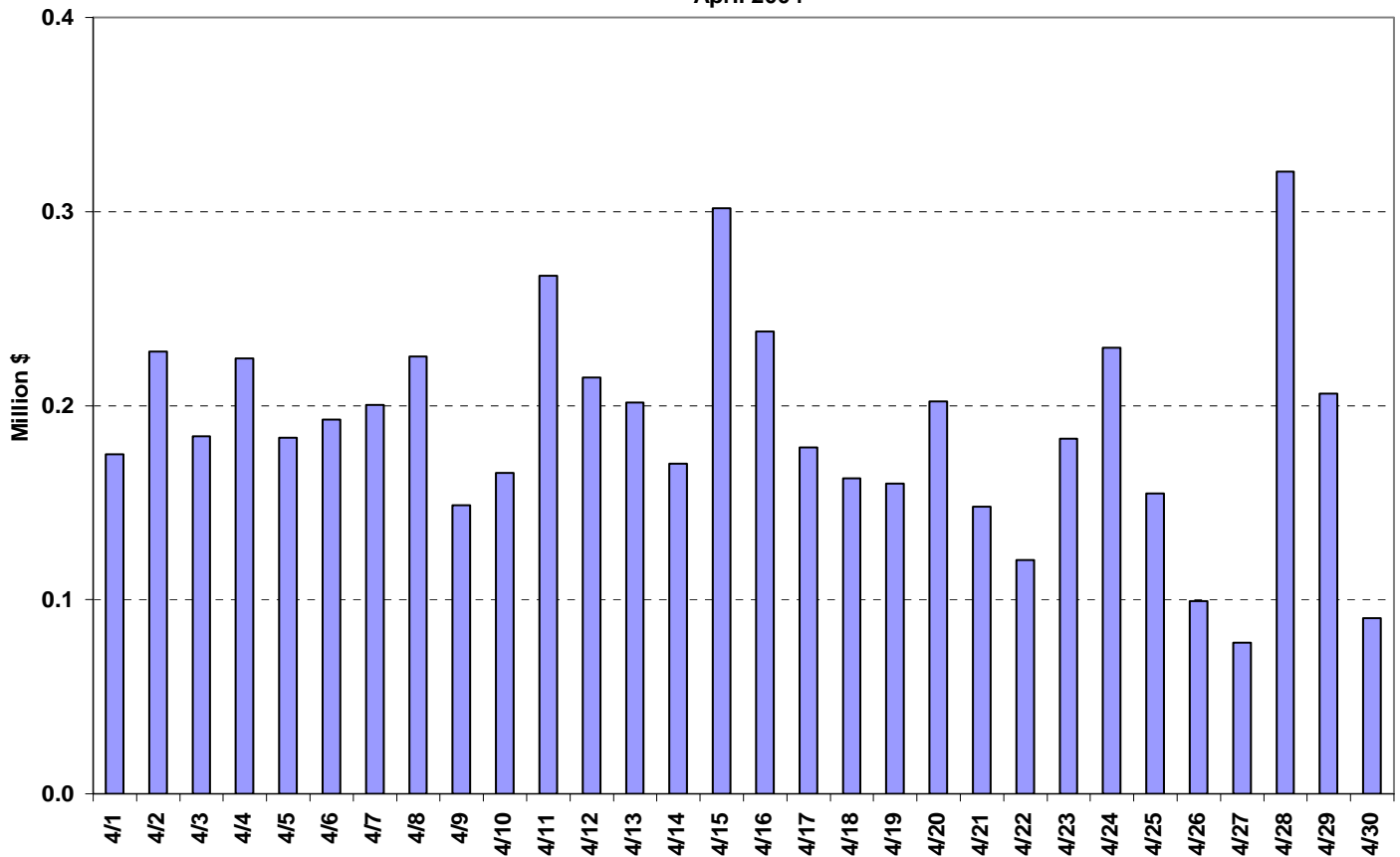
Local Congestion Cost (Total: \$9.2 Million)



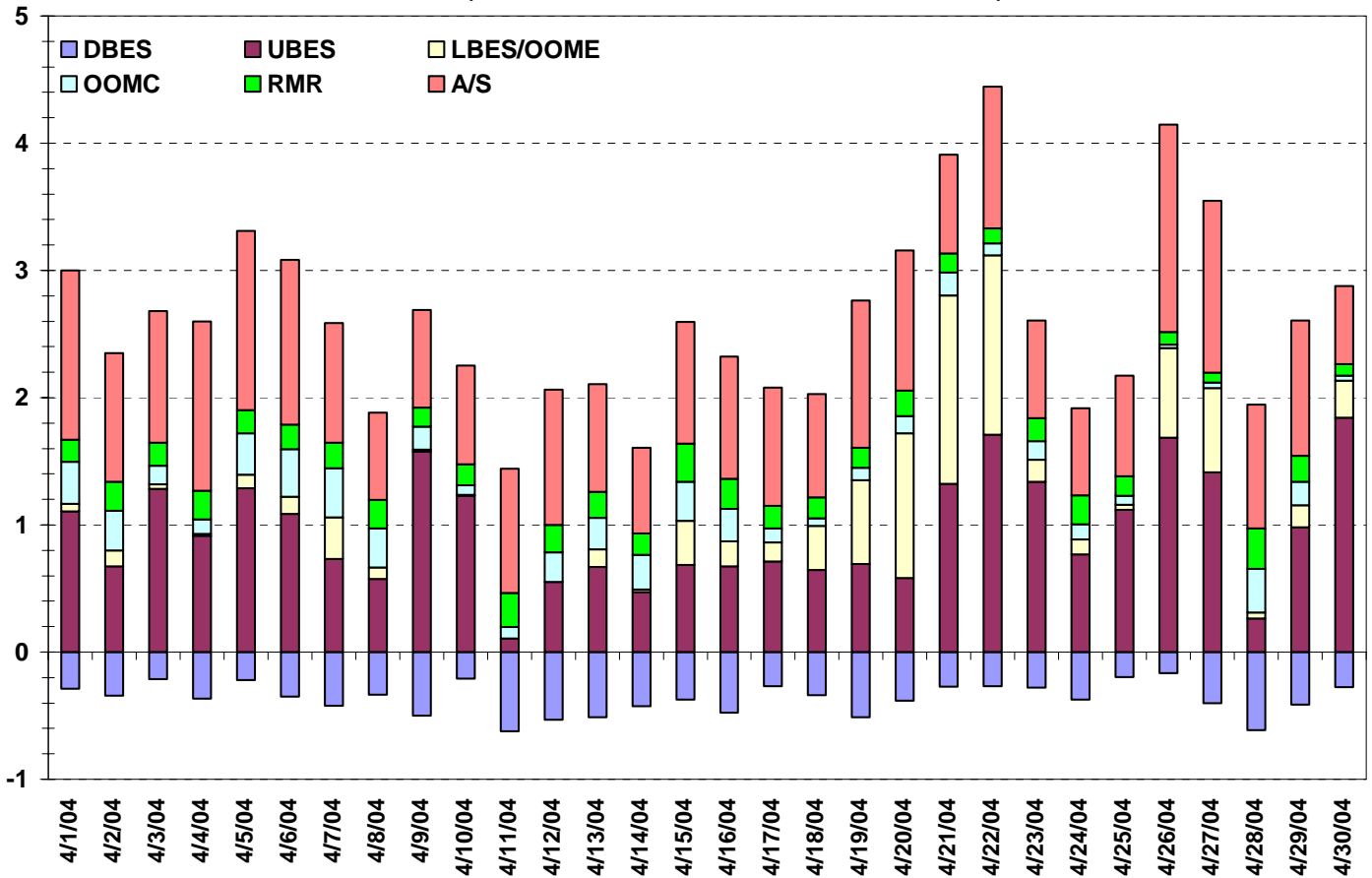
**RMR Cost**  
**April 2004**



**RMR Net Cost (Total: 5.6 Million)**  
**April 2004**



**Cost Summary (in Million \$)**  
 (Total w DBES: \$ 49.80 Total w/o DBES: \$ 60.74)



Note:

1. DBES cost is a credit to system costs and therefore is shown as a negative number here to differentiate it from the other types of Reliability Costs.

2. BES deployment costs include two parts: the cost for Power Balance and the cost for CSC Congestion. Due to Relaxed Balanced Schedule, the cost paid for Power Balance covers both the difference between ERCOT load forecast and QSE's schedule and the difference between QSE's Relaxed scheduled load and the load it would schedule should RBS were not allowed. The cost for Power Balance is not further divided accordingly because currently we do not have a way to differentiate these two types of Power Balance costs.

Please contact Shuye Teng at 512-248-3998 or email at [steng@ercot.com](mailto:steng@ercot.com) should you have any questions.