



Control Number: 27706



Item Number: 180

Addendum StartPage: 0

PROJECT NO. 27706

REPORTS OF THE ELECTRIC § PUBLIC UTILITY COMMISSION
RELIABILITY COUNCIL OF TEXAS § OF TEXAS

ERCOT'S 2009 ANNUAL REPORT
ON EMERGENCY INTERRUPTIBLE LOAD SERVICE (EILS)

COMES NOW, Electric Reliability Council of Texas, Inc. (ERCOT) and submits this report pursuant to P.U.C. SUBST. R. §25.507(f) which requires ERCOT to review the effectiveness and benefits of the Emergency Interruptible Load Service (EILS) and report its findings to the Commission annually within 70 days of the completion of the EILS program year. P.U.C. SUBST. R. §25.507(f) requires that the report "contain, at a minimum, the number of megawatts (MWs) procured in each period, the total dollar amount spent on procuring EILS, the number and level of Emergency Electric Curtailment Plan (EECP) events, and the number and duration of deployments."

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Substantive Rule §25.507 (b)(3) describes the EILS program year as February through January for purposes of administering the annual EILS cost cap. This report is therefore filed timely, within the 70 days following the conclusion of the 2009 program year on January 31, 2010.

Document	Attachments
ERCOT EILS Annual Report for February 1, 2009, through January 31, 2010	A
Procurement, Availability, and Settlement Summary (PowerPoint slides)	B

Respectfully submitted,

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ATTORNEYS FOR ELECTRIC
RELIABILITY COUNCIL OF TEXAS, INC.

**ERCOT Annual Report Pursuant to P.U.C. SUBST. R. § 25.507(f)
Regarding Emergency Interruptible Load Service (EILS) for the
Program Year of February 1, 2009, through January 31, 2010**

EILS History

On March 20, 2007, the Commission approved P,U.C. SUBST. R. §25.507, *Electric Reliability Council of Texas (ERCOT) Emergency Interruptible Load Service (EILS)*,¹ requiring ERCOT to develop and administer EILS. The Commission later approved amendments to P,U.C. SUBST. R. §25.507 on November 1, 2007.²

ERCOT stakeholders have recommended and the ERCOT Board has approved the following Protocol Revision Requests (PRRs) related to EILS:

- PRR705 EILS (approved 4/18/07)
- PRR716 Self-Provision of EILS (approved 5/16/07)
- PRR717 EILS Disputes and Resettlements (approved 12/11/07)
- PRR723 Conform 5.6.6.1 EECF (approved 06/19/07)
- PRR725 EILS Formula & Standard Form Correction (approved 09/18/07)
- PRR746 Revisions to EILS Provisions to Conform to Amended P.U.C. SUBST. R. 25.507 (approved 12/11/07)
- PRR757 EILS Formula Correction (approved 7/15/08)
- PRR760 EILS Availability Factor Clarification (approved 7/15/08)
- NPRR107 Nodal EILS (approved 7/15/08)
- PRR 781 EILS Self-Provision Formula Correction and Clarifications (approved 1/20/09)
- PRR 786 Modifications to EILS Settlement (approved 3/17/09)

Procurement History

ERCOT procures EILS three times annually, for four-month Contract Periods. To date, ERCOT has solicited bids to provide EILS for 10 Contract Periods, as follows:

1. April 19, 2007 - May 31, 2007

¹ *PUC Rulemaking Concerning a Demand-Response Program for ERCOT Emergency Conditions*, Project No. 33457.

² *PUC Rulemaking to Amend ERCOT Emergency Interruptible Load Service*, Project No. 34706. (The Commission adopted amendments that eliminated the 500 MW procurement floor and increased the annual EILS cost cap from \$20 million to \$50 million).

2. June 1, 2007 - September 30, 2007
3. October 1, 2007 - January 31, 2008
4. February 1, 2008 - May 31, 2008.
5. June 1, 2008 – September 30, 2008.
6. October 1, 2008 – January 1, 2009
7. February 1, 2009 – May 31, 2009
8. June 1, 2009 – September 30, 2009
9. October 1, 2009 – January 31, 2010
10. February 1, 2010 – May 31, 2010

Attachment B to this report provides detailed results of ERCOT's procurements of EILS through the program's history by Contract Period, including:

- Descriptions of Contract Periods and Time Periods
- Capacity procurements by Time Period and by Contract Period, including the number of Megawatts (MW) procured and the total number of MW offered
- Number of procured EILS Resources
- Average size of procured EILS Resources
- Number of individual Loads submitted to ERCOT for resource identification
- Cumulative number of individual Loads offered into EILS
- Summary of final settlement costs of EILS, adjusted to account for EILS Resources that achieved availability factors of less than 95%,³ and settlement costs as a percentage of the originally contracted commitments
- Detailed tables with capacity procurements by Time Period and by Contract Period, including average prices paid (in dollars per MW per hour).

Effectiveness & Benefits

Operational Benefits

ERCOT Protocols call for EILS to be deployed in Level 2B or Level 3 of an Energy Emergency Alert (EEA),⁴ and to date the service has not been deployed by ERCOT Operations. ERCOT Operations did not declare an EEA at any time during the EILS 2009 program year, and no EEA events to date have progressed to the EILS deployment stage.

ERCOT Staff continues to have confidence in EILS due to the stringent availability and testing requirements associated with the program.

Consistent with the intent of the PUC Substantive Rule,⁵ the ERCOT Protocols⁶ require each EILS Resource to achieve an availability factor of at least 95% in each committed Time Period.

³ See ERCOT Protocol § 6.10.13.3.

⁴ See ERCOT Protocol § 5.6.7. On May 1, 2009, the effective date of ERCOT Protocol Revision Request 775, EEA replaced the former Emergency Electric Curtailment Plan (EECP) in order to conform to the terminology used by the North American Electric Reliability Corporation (NERC). EILS deployment criteria remained unchanged.

⁵ See Subst. Rule 25.507 (e).

Availability factors are calculated by ERCOT Staff after the end of the Contract Period through detailed reviews of Load-level interval meter data for each EILS Resource. EILS Resources that achieve availability factors of less than 95% are subject to a six-month suspension from their ability to provide EILS, in addition to reduced payment. EILS Resources with a total of approximately 70 MW of EILS-capable capacity were suspended during the 2009 program year for failure to meet these availability requirements. The Loads comprising these resources will be able to regain their eligibility to provide EILS only after submitting a corrective action plan to ERCOT and successfully completing a load-shed test administered by ERCOT.

Also consistent with the Rule,⁷ EILS Resources are subject to annual unannounced load-shed tests, and are subject to suspension for failing two consecutive load-shed tests.⁸ ERCOT Staff conducts this testing from the ERCOT Control Center by issuing an instruction to each individual Qualified Scheduling Entity (QSE) that closely simulates the actual Verbal Dispatch Instruction the QSE would receive in an EEA event. ERCOT Staff is current with its EILS testing and to date no EILS Resources have failed two consecutive tests.

This combination of performance metrics and specific penalties for non-compliance is among the most stringent for any demand response program in North America. ERCOT Staff believes that these metrics work to ensure that participating QSEs and their EILS Resources remain highly focused on their EILS responsibilities, providing ERCOT operators with the confidence that EILS Resources will perform when called upon.

Market Benefits

In approving the amendments to P.U.C. SUBST. R. §25.507, the Commission asserted that a secondary purpose of EILS is to enable additional demand response participation in the ERCOT market:

The commission agrees . . . that one of the important values of this program is to establish the role of demand-response in providing reliability services in ERCOT by enlisting numerous customers as providers of demand-response, particularly customers in classes that have not participated in the LaaRs program. The commission also finds value in having resources that have not participated in demand response programs being enabled to do so by this program. The commission encourages ERCOT to make an effort to attract such customers to the program.⁹

A number of facts and trends provide evidence that EILS is successfully meeting this Commission goal.

The number of EILS Resources and individual Loads participating in EILS, as illustrated in Slides 8 through 10 in the accompanying document (Attachment B), continues to increase steadily with each EILS Contract Period. In a trend that is not unusual for demand response

⁶ See Protocols § 6.10.13.3 (c) and (d).

⁷ See Subst. Rule 25.507 (c)(4)(D).

⁸ See Protocols § 6.10.13.2.

⁹ *PUC Rulemaking to Amend ERCOT Emergency Interruptible Load Service*, Project No. 34706, at. 4-5 (November 8, 2007).

programs in general, the total amount of procured capacity is growing at a slower rate than the number of individual participating Loads. This trend can be attributed to a series of factors, including:

- Maturity of the service. A number of larger Loads that were readily able to participate in a 10-minute demand response service enrolled in EILS early in its history, and as a result EILS's original fleet of EILS Resources was larger in average size than it is today (see chart on slide 8 in Attachment B). As the service has matured, EILS providers (QSEs and their channel partners) have recruited new participants from among the broader population of commercial customers. Many of these new entrants are new to operations-based demand response and have only recently acquired the customer education, communications systems and curtailment technologies necessary to respond to a dispatch instruction within the required 10 minutes. These new entrants are typically smaller Loads that are part of aggregated EILS Resources. EILS providers that are new to the service in 2009 include numerous retailers, small manufacturers, and service-sector industries, in several cases consisting of statewide aggregations of chains and/or similar Loads.
- Suspensions. A total of 25 EILS Resources were suspended in 2009 for achieving availability factors of less than 95%. This has sidelined approximately 70 MW of EILS capacity that could potentially have contributed to a more robust growth rate in the 2009 program year.
- Bidding behavior. ERCOT management, for economic reasons, declined to accept certain EILS bids in two of the three EILS Contract Periods in 2009. These decisions are illustrated in Slides 4 through 7 in Attachment B. While ample room remained under the annual \$50 million EILS cost cap,¹⁰ ERCOT management made these procurement decisions consistent with the guidelines established in the document entitled "ERCOT Process for Determining Contract Period Cost Limits and Reasonableness of Bids for Emergency Interruptible Load Service."¹¹

Another benchmark of success for EILS in increasing the growth of available demand response is to identify how much committed EILS capacity is being provided by Loads other than registered Loads Acting as a Resource (LaaRs). Non-LaaR EILS Resources can be viewed as new demand response resources, as they were previously not available for operational dispatch by ERCOT. The following table shows LaaR and non-LaaR participation in EILS for the three Contract Periods in 2009:

¹⁰ See Subst. R. 25.507 (b)(3).

¹¹ See

http://www.ercot.com/content/services/programs/load/eils/keydocs/ERCOT_EILS_Procurement_Process_Revised021309.pdf

<i>Time Period</i>	<i>Total Contracted MW</i>	<i>LaaR MW Procured</i>	<i>Non-LaaR MW Procured</i>	<i>Non-LaaR MW Bids not Accepted</i>
February-May 2009 Contract Period				
Business Hours 1	163.6	0 (0%)	163.6 (100%)	0
Business Hours 2	168.2	0 (0%)	168.2 (100%)	0
Business Hours 3	163.4	0 (0%)	163.4 (100%)	0
Non-Business Hours	137.9	0 (0%)	137.9 (100%)	0
June-September 2009 Contract Period				
Business Hours 1	276.4	103.5 (37%)	172.9 (63%)	95.7
Business Hours 2	154.7	0 (0%)	154.7 (100%)	74.3
Business Hours 3	237.3	0 (0%)	237.3 (100%)	0
Non-Business Hours	255.6	103.5 (40%)	152.1 (60%)	72.9
October 2009-January 2010 Contract Period				
Business Hours 1	360.9	103.8 (29%)	257.1 (71%)	55.1
Business Hours 2	353.3	103.8 (29%)	249.5 (71%)	58.4
Business Hours 3	268.0	0 (0%)	268.0 (100%)	33.5
Non-Business Hours	334.5	103.8 (31%)	230.7 (69%)	39.9

Non-LaaR EILS Resources provided 76% of the total weighted committed EILS capacity (MW x Hours) for the 2009 EILS program year. Additionally, as the data in the far right hand column illustrates, non-LaaR resources could potentially have provided a greater percentage of the total had these bids been accepted.

In a majority of hours, offered LaaR capacity exceeds the 50% ceiling (1150 MW) that ERCOT may procure for Responsive Reserves, resulting in prorated awards and sidelined LaaR capacity. EILS provides an alternative market outlet for some of that excess demand response, which otherwise would be unavailable for ERCOT operations.



Emergency Interruptible Load Service (EILS)

ATTACHMENT B

**Annual Report to the
Public Utility Commission of Texas
for Program Year 2009**

**Project No. 27706
April 2010**

Contents

- **Procurement Summary**
 - Capacity (MW) bid and procured
 - Number of procured EILS Resources and average EILS Resource size
 - Number of participating individual Loads
- **Suspensions due to availability factors below 95%**
- **Settlement Summary**
- **Detailed results by Contract Period**

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Contract Periods & Time Periods

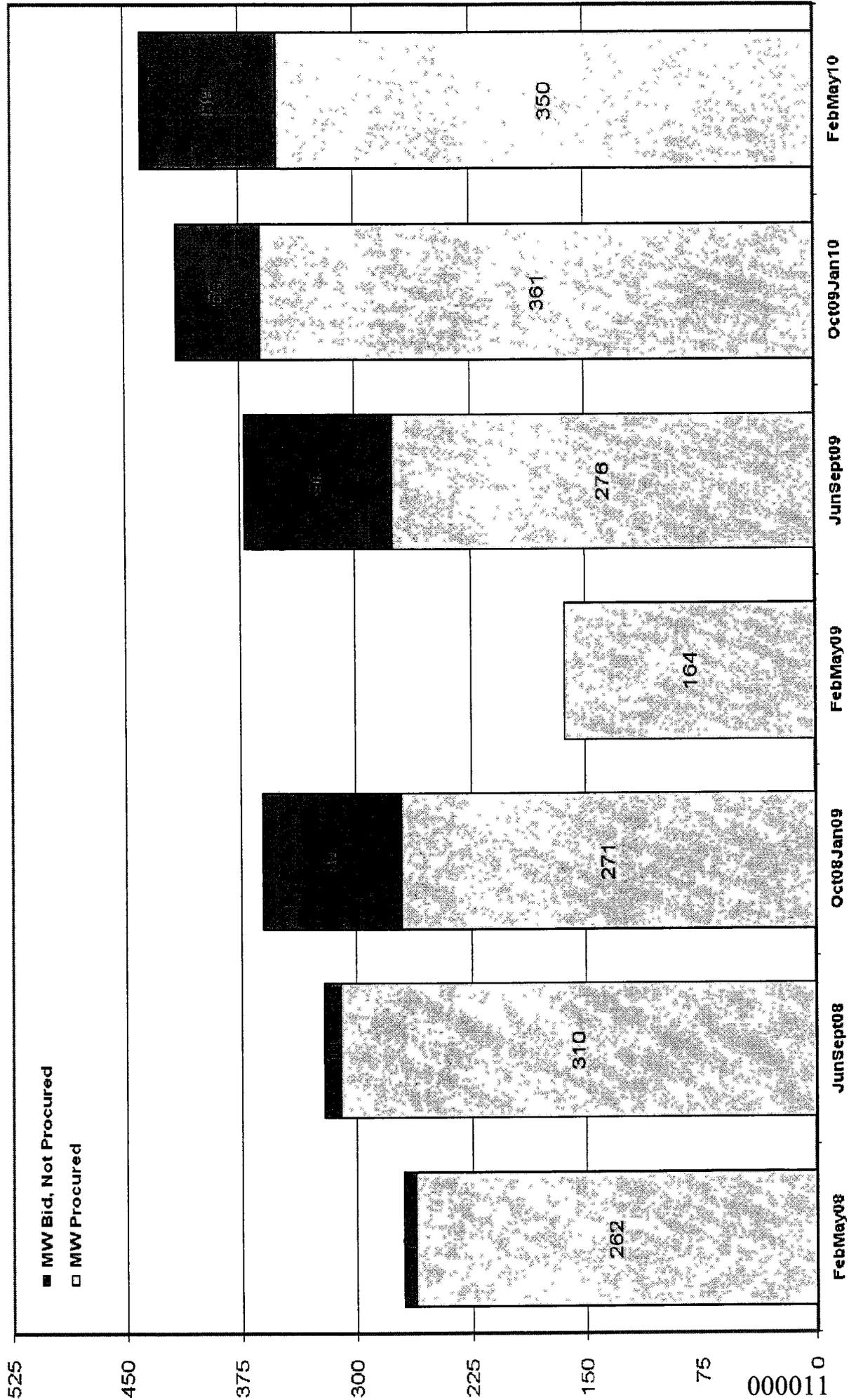
- **EILS is procured 3 times annually for 4-month Contract Periods**
 - February thru May
 - June thru September
 - October thru January
- **Participants may bid to provide the service for one or more Time Periods:**
 1. Business Hours 1: 8AM to 1PM Monday-Friday*
 2. Business Hours 2: 1PM to 4PM Monday-Friday*
 3. Business Hours 3: 4PM to 8PM Monday-Friday*
 4. Non-Business Hours: All other hours

* Except ERCOT Holidays

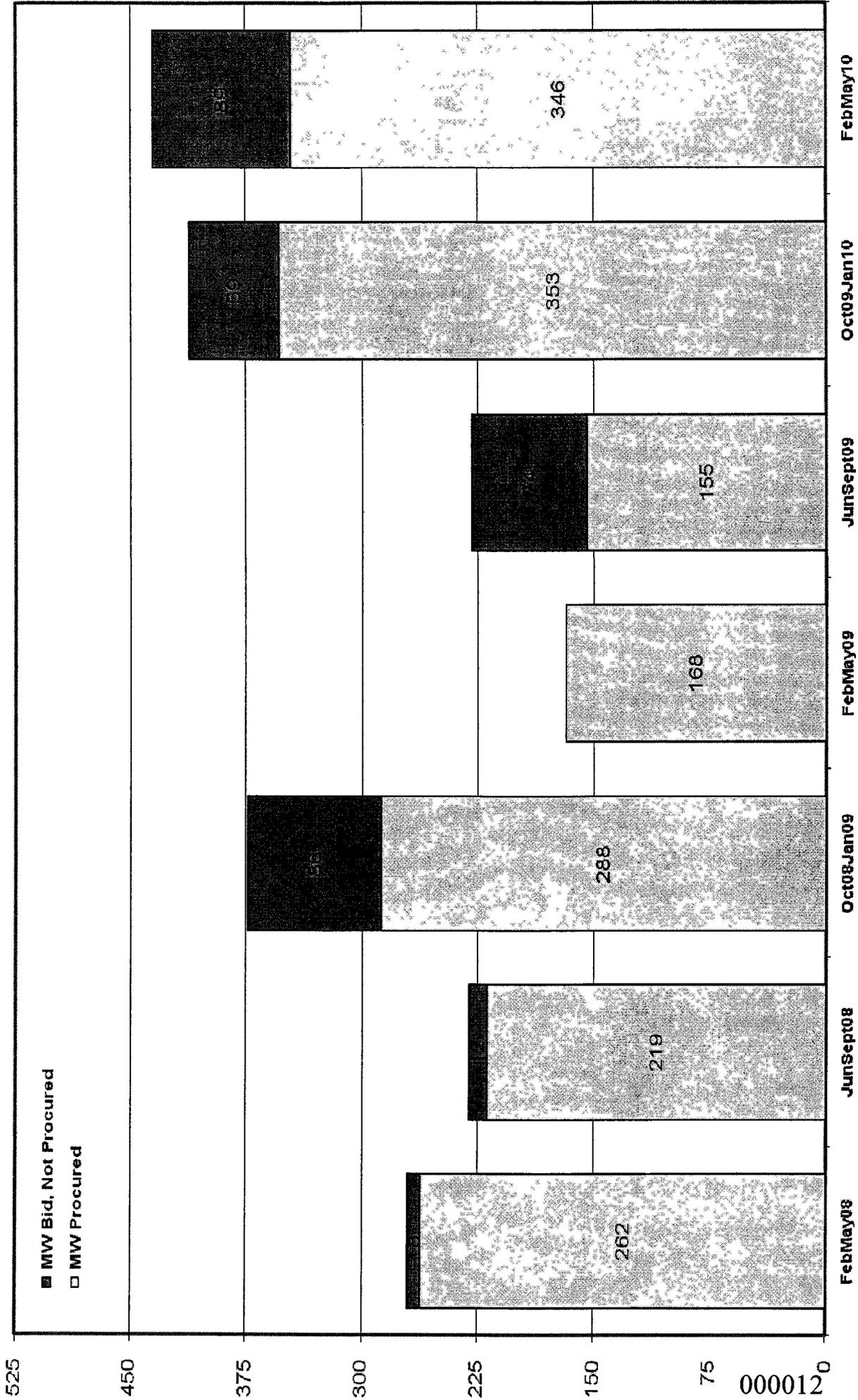
- **Time Periods are designed to allow flexibility in for customers during traditional business hours**
- **Time Periods have been in effect in current form since the June-September 2008 EILS Contract Period**

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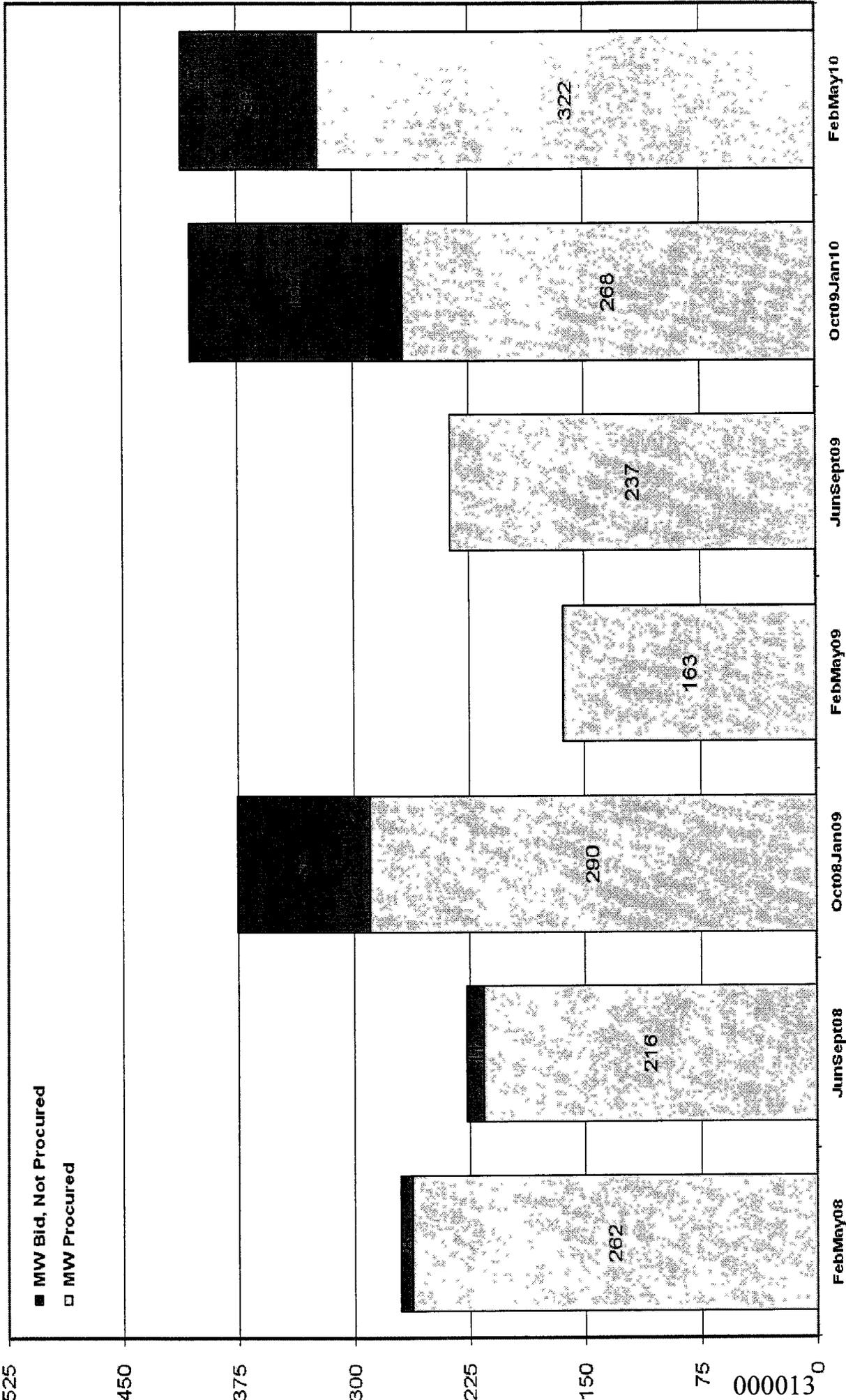
Capacity Procurement Trends (Business Hours 1)



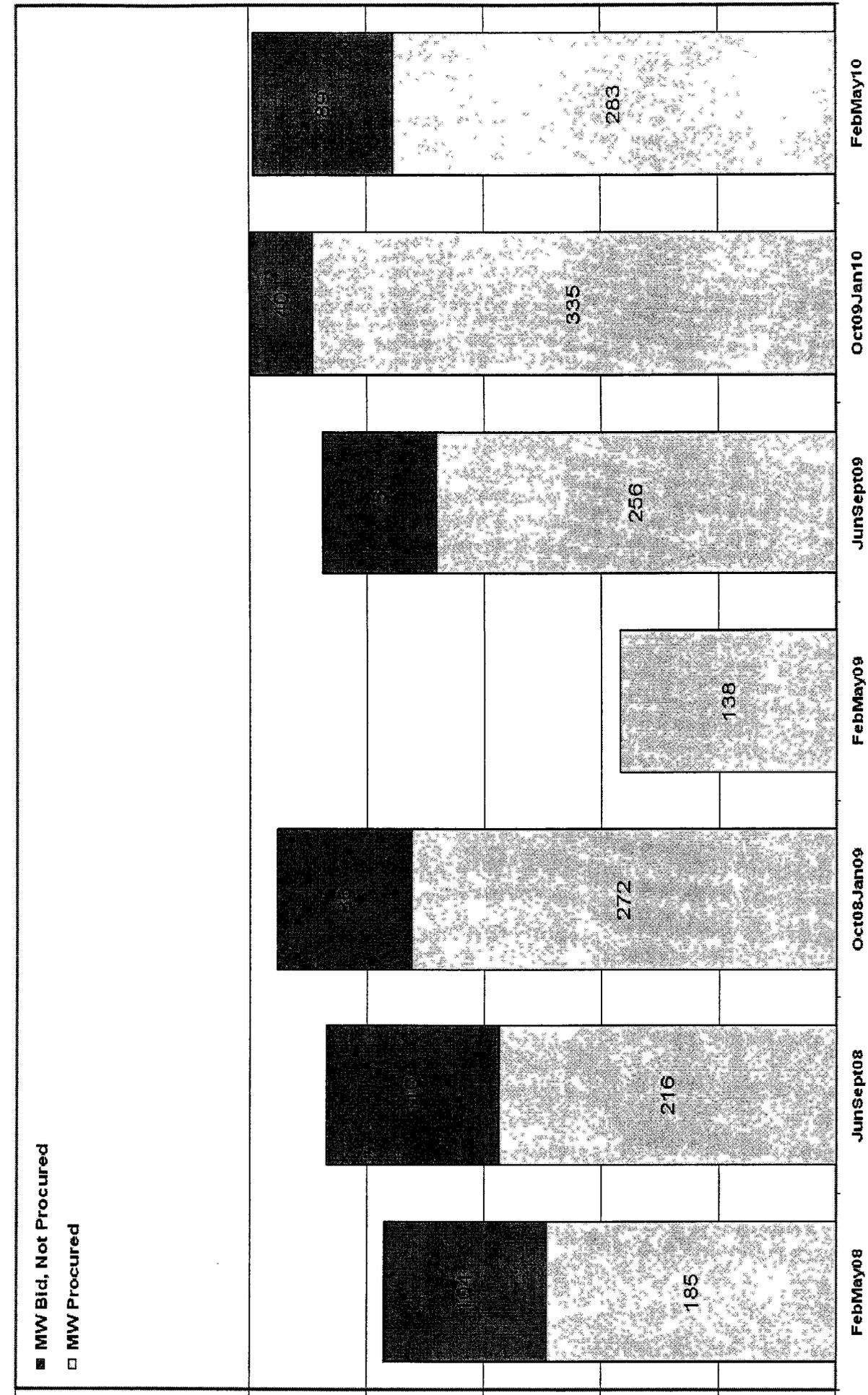
Capacity Procurement Trends (Business Hours 2)



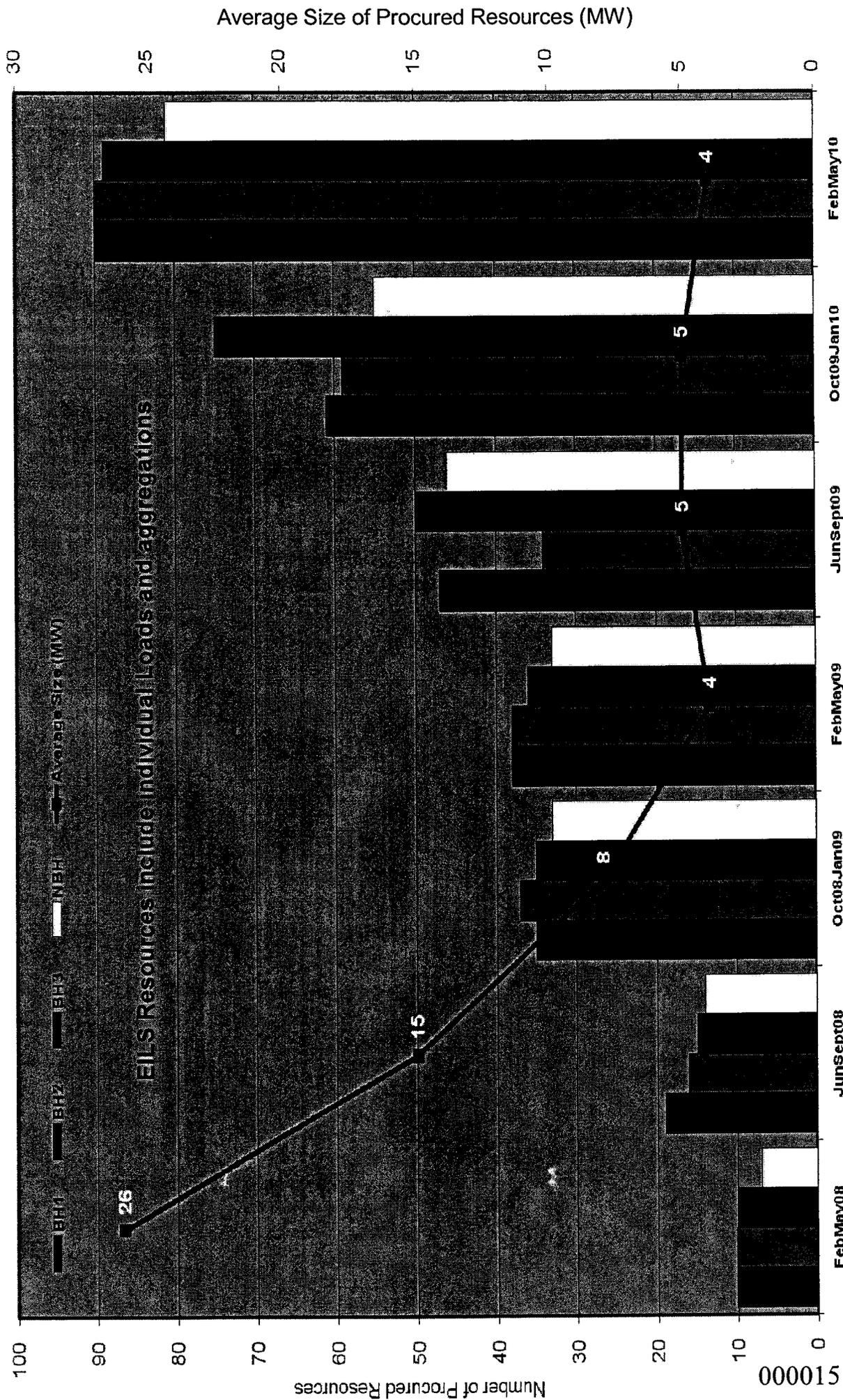
Capacity Procurement Trends (Business Hours 3)



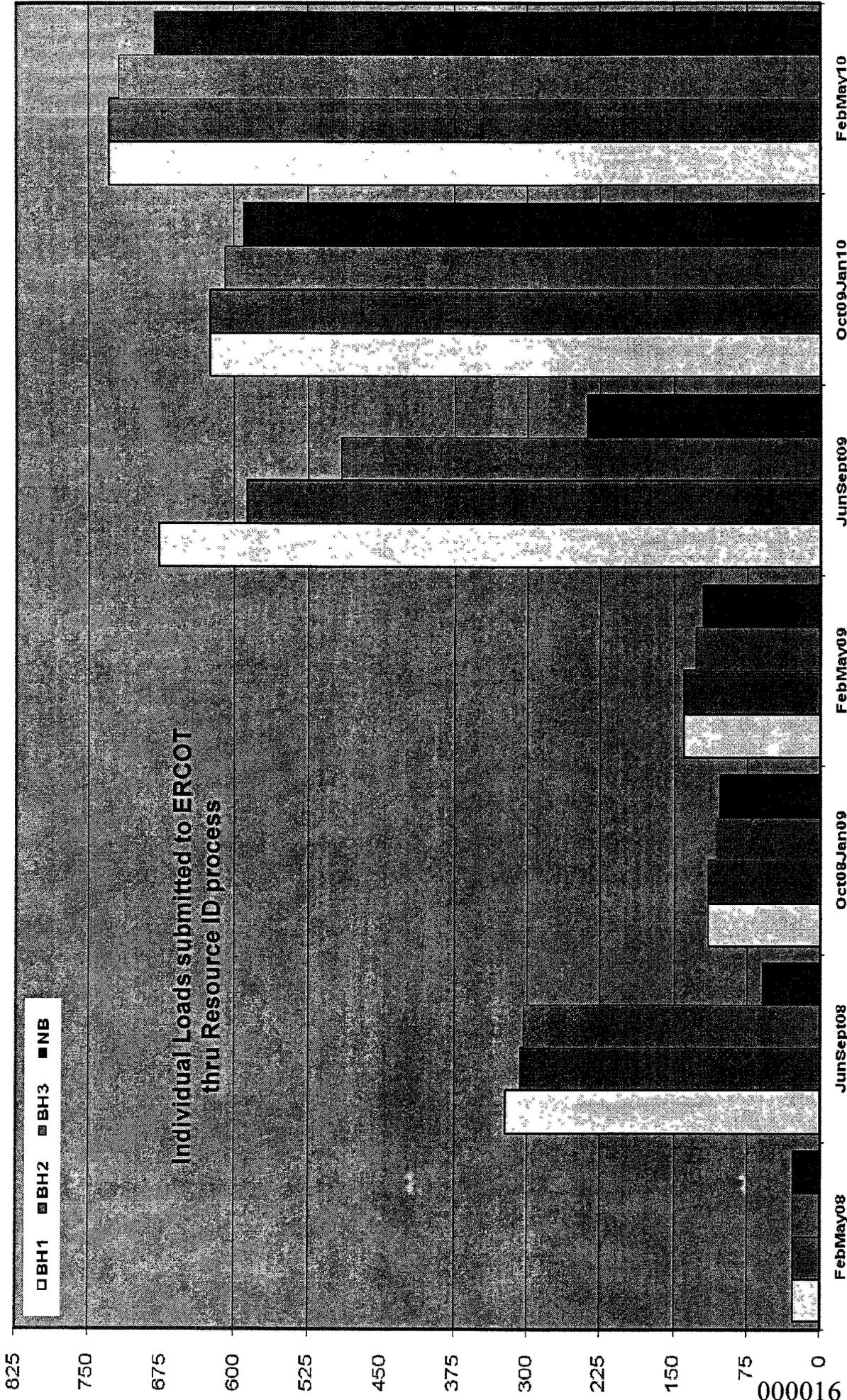
Capacity Procurement Trends (Non-Business Hours)



Procurement Trends (number & avg. size of resources)



Procurement Trends (number of individual Loads)

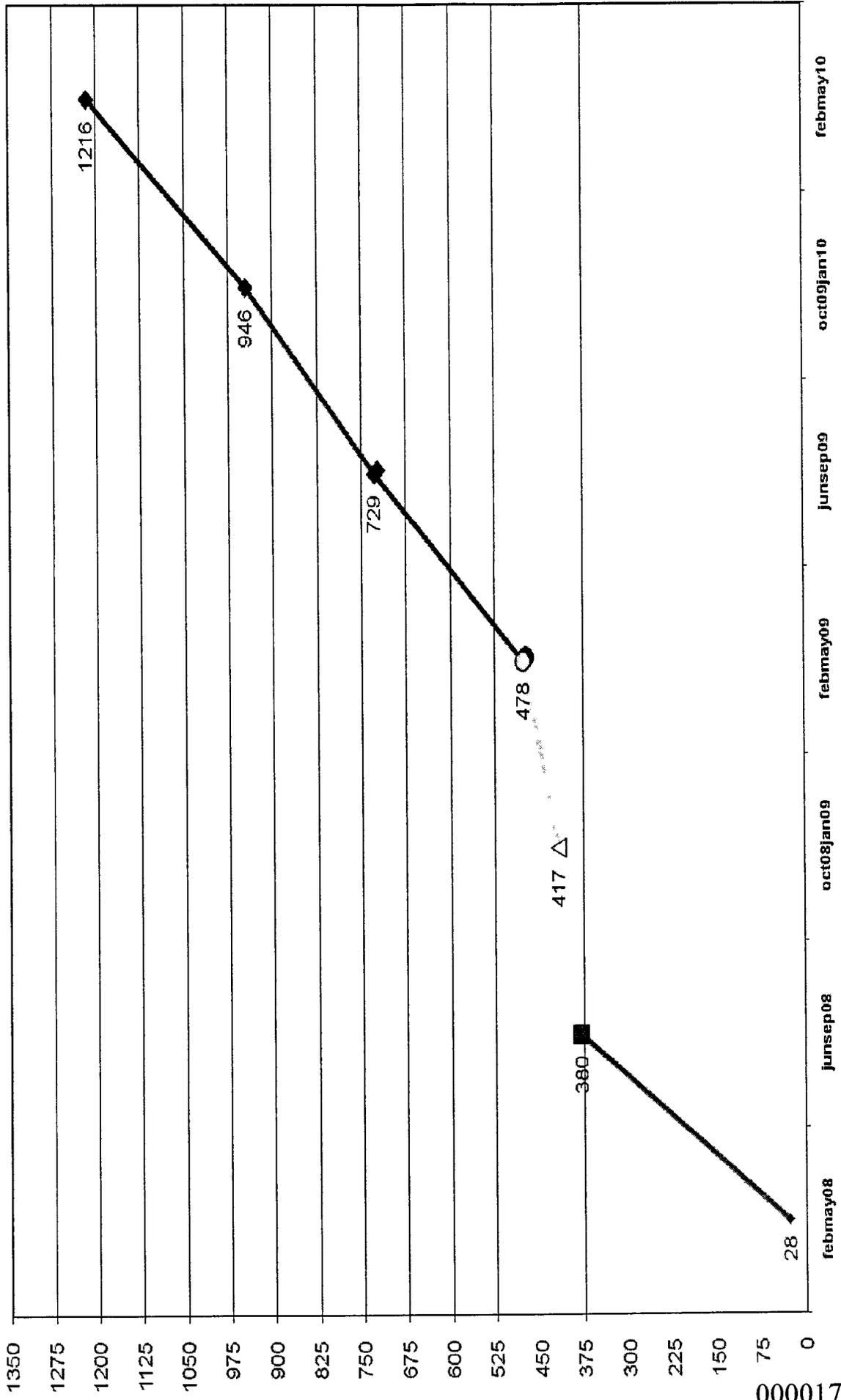


April 2010



Individual Load Participation

Cumulative number of unique individual loads submitted into EILS



Availability Issues

- EILS Resources suspended due to availability factors of less than 95%
 - Pursuant to Subst. R. §25.507(e) and Protocols §6.10.13.4

Contract Period	No. of Resources	Approx. curtailable MW
Feb.-May 2009	12	38
June-Sept. 2009	13	32
Oct.09-Jan 10	To be determined	

- EILS Resources with availability factors of <95% also have their payments reduced by the corresponding amount
- Suspended Loads may regain eligibility only after submitting a corrective action plan and successfully completing a load-shed test administered by ERCOT

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Settlement Summary

EILS CONTRACT PERIOD	Projected cost based on procurement*	Final cost after availability adjustments	Final % of original
Feb.-May 08	\$ 5,340,790.32	\$ 5,298,600.17	99.2%
June-Sept. 08	\$ 6,584,675.82	\$ 6,399,048.95	97.2%
Oct.08-Jan 09	\$ 8,225,943.52	\$ 4,940,075.36	60.1%
TOTAL 2008	\$ 20,151,409.66	\$ 16,637,724.48	82.6%
Feb.-May 09	\$ 4,508,954.75	\$ 4,198,560.86	93.1%
June-Sept. 09	\$ 6,361,774.13	\$ 6,142,071.96	96.5%
Oct. 09-Jan. 10	\$ 7,789,961.33	Settlement Apr. 2010	
TOTAL 2009 (Projected)	\$	18,130,594.15	
TOTAL 2008-09 (Projected)	\$	34,768,318.63	
Feb-May 10	\$ 6,692,995.39	Settlement Aug. 2010	
TOTAL to date (Projected)	\$	41,461,314.02	

* Projected costs are based on procured EILS capacity as reflected in executed contracts with QSEs and EILS Resources. These numbers may differ slightly from the amounts cited in Market Notices released prior to the start of a Contract Period. Any such differences are related to downward adjustments made by ERCOT to the capacity values of specific bids pursuant to ERCOT's authority under Protocols Section 6.5.12 (11). It is ERCOT's policy to consult with the QSE representing the EILS Resource prior to making any such adjustment.





Results by Contract Period

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Procurement History

Contract Period	Time Period	Capacity Offered	Capacity Procured
April - May 2007	Business Hours ^[1]	156 MW	0
	Non-Business Hours ^[2]	156 MW	0
June - Sept. 2007	Business Hours	213 MW	0
	Non-Business Hours	213 MW	0
Oct. 2007 - Jan. 2008	Business Hours	170 MW	0
	Non-Business Hours	180 MW	0

EILS was not procured for these Contract Periods, as bids did not meet 500 MW minimum requirement in effect at the time.

^[1] Hour Ending (HE) 0900 through 2000, Monday thru Friday, except ERCOT Holidays.

^[2] All other hours.

February-May 2008 Contract Period

Time Period	Business Hours HE 0900 – 2000, M-F except Holidays	Non-Business Hours All Other Hours
Capacity Procured	262 MW	185 MW
Capacity Offered	270 MW	289 MW
# of EILS Resources Procured	10 (includes 5 aggregations)	7 (includes 2 aggregations)
Avg. Cost MW / Hour	\$9.73	\$7.86

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• Total adjusted cost for this Contract Period: \$5,298,600.17



June-September 2008 Contract Period

Time Period	Business Hrs. HE 0900 – 1300, M-F except Holidays	Peak Hrs. 1 HE 1400 – 1600, M-F except Holidays	Peak Hrs. 2 HE 1700 – 2000, M-F except Holidays	Non-Bus. Hrs. All Other Hours
Capacity Procured	310 MW	219 MW	216 MW	216 MW
Capacity Offered	321 MW	231 MW	227 MW	326 MW
# of EILS Resources Procured	19 (incl. 13 agg's)	16 (incl. 10 agg's)	15 (incl. 9 agg's)	14 (incl. 8 agg's)
Avg. Cost MW / Hour	\$10.92	\$11.07	\$11.29	\$8.97

• Total adjusted cost for this Contract Period: \$6,399,048.95

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October 2008 – January 2009 Contract Period

Time Period	Bus. Hrs. 1 HE 0900 – 1300, M-F except Holidays	Bus. Hrs. 2 HE 1400 – 1600, M-F except Holidays	Bus. Hrs. 3 HE 1700 – 2000, M-F except Holidays	Non-Bus. Hrs. All Other Hours
Capacity Procured	272 MW	289 MW	291 MW	273 MW
Capacity Offered	361 MW	374.3 MW	376.2 MW	358.2 MW
# of EILS Resources Procured	35 (incl. 25 agg's)	37 (incl. 25 agg's)	35 (incl. 23 agg's)	33 (incl. 21 agg's)
Avg. Cost MW / Hour	\$10.83	\$11.28	\$11.39	\$9.61

• Total adjusted cost for this Contract Period: \$4,940,075.36

• Total cost for the 2008 EILS program year: \$16,637,724.48

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February – May 2009 Contract Period

Time Period	Bus. Hrs. 1 HE 0900 – 1300, M-F except Holidays	Bus. Hrs. 2 HE 1400 – 1600, M-F except Holidays	Bus. Hrs. 3 HE 1700 – 2000, M-F except Holidays	Non-Bus. Hrs. All Other Hours
Capacity Procured	163.6 MW	168.2 MW	163.4 MW	137.9 MW
Capacity Offered	163.6 MW	168.2 MW	163.4 MW	137.9 MW
# of EILS Resources Procured	38 (incl. 24 agg's)	38 (incl. 24 agg's)	36 (incl. 22 agg's)	32 (incl. 20 agg's)
Avg. Cost MW / Hour	\$11.10	\$11.56	\$11.62	\$10.15

• Total adjusted cost for this Contract Period: \$4,198,560.86

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June - September 2009 Contract Period

Time Period	Bus. Hrs. 1 HE 0900 – 1300, M-F except Holidays	Bus. Hrs. 2 HE 1400 – 1600, M-F except Holidays	Bus. Hrs. 3 HE 1700 – 2000, M-F except Holidays	Non-Bus. Hrs. All Other Hours
Capacity Procured	276.4 MW	154.7 MW	237.3 MW	255.6 MW
Capacity Offered	372.1 MW	229.0 MW	237.3 MW	328.5 MW
# of EILS Resources Procured	47 (incl. 34 agg's)	34 (incl. 27 agg's)	50 (incl.s 34 agg's)	46 (incl. 30 agg's)
Avg. Cost MW / Hour	\$ 8.64	\$ 8.29	\$ 9.90	\$ 8.66

• Total adjusted cost for this Contract Period: \$6,142,071.96

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October 2009 – January 2010 Contract Period

Time Period	Bus. Hrs. 1 HE 0900 – 1300, M-F except Holidays	Bus. Hrs. 2 HE 1400 – 1600, M-F except Holidays	Bus. Hrs. 3 HE 1700 – 2000, M-F except Holidays	Non-Bus. Hrs. All Other Hours
Capacity Procured	360.9 MW	353.3 MW	268.0 MW	334.5 MW
Capacity Offered	416.0 MW	411.7 MW	405.3 MW	374.4 MW
# of EILS Resources Procured	61 (incl. 37 agg's)	59 (incl. 35 agg's)	75 (incl. 46 agg's)	55 (incl. 35 agg's)
Avg. Cost MW / Hour	\$8.01	\$8.12	\$8.87	\$7.77

• Projected cost for this Contract Period: \$ 7.79 million

(Settlement posting date: April 12, 2010)

• Projected total cost for 2009 Program Year: \$18.66 million

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February – May 2010 Contract Period

Time Period	Bus. Hrs. 1 HE 0900 – 1300, M-F except Holidays	Bus. Hrs. 2 HE 1400 – 1800, M-F except Holidays	Bus. Hrs. 3 HE 1700 – 2000, M-F except Holidays	Non-Bus. Hrs. All Other Hours
Capacity Procured	349.9 MW	345.8 MW	322.1 MW	283.2 MW
Capacity Offered	439.2 MW	435.1 MW	411.4 MW	372.5 MW
# of EILS Resources Procured	90 (incl. 61 agg's)	90 (incl. 61 agg's)	89 (incl. 60 agg's)	81 (incl. 55 agg's)
Avg. Cost MW / Hour	\$7.76	\$7.75	\$8.38	\$7.44

• Projected cost for this Contract Period: \$ 6.67 million

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