PROJECT NO. 27706

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

ERCOT'S 2012 ANNUAL REPORT ON EMERGENCY RESPONSE SERVICE

COMES NOW, Electric Reliability Council of Texas, Inc. (ERCOT) and submits this report on the effectiveness and benefits of the Emergency Response Service (ERS) pursuant to P.U.C. SUBST. R. 25.507(g). This rule requires ERCOT to report its findings to the Commission by April 15 of each calendar year and requires that the report "contain, at a minimum, the number of MW procured in each period, the total dollar amount spent, the number and level of EEA events, and the number and duration of deployments." ERCOT's evaluation of ERS is contained in Attachment A, whereas the underlying data are included in Attachment B.

ERCOT notes that this report only addresses the standard ERS product, and does not address either of the two ERS pilot projects (30-Minute ERS and Weather-Sensitive ERS) ERCOT is presently conducting. ERCOT will provide reports on these pilot projects to the ERCOT Board of Directors upon the conclusion of each project. If one or both of these products is ultimately integrated into the ERCOT Protocols, ERCOT will include an analysis of those products as part of its annual ERS assessment.

Respectfully submitted,

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ATTORNEYS FOR ELECTRIC
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Attachment A

ERCOT Annual Report Pursuant to P.U.C. SUBST. R. 25.507(g)
Regarding Emergency Response Service for the
Program Year February 1, 2012, through January 31, 2013

ERS 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. Later that year, the Commission approved amendments to Rule 25.507 that eliminated the 500 MW procurement floor and increased the annual cost cap from $20 million to $50 million).[2]

On March 22, 2012, the Commission adopted an order repealing the rule and replaced it with a new Rule 25.507 expanding the program to allow participation by generators and removing certain program restrictions. To reflect the broader participation, the program was renamed "Emergency Response Service" (ERS).

Through the end of the program year covered by this report, ERCOT stakeholders had recommended and the ERCOT Board had approved the following Protocol Revision Requests (PRRs) or Nodal Protocol Revision Requests (NPRRs) related to ERS:

- 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 EECP (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)
- NPRR 107 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)
- NPRR 278 EILS Modifications to Correct Self-Provision Settlement Equations, to Accommodate Advanced Metering Infrastructure, and other Clarifications (approved 11/16/10; effective date 2/1/11)

[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.

- NPRR 379 EILS Dispatch Sequence and Performance Criteria Upgrades (approved 9/20/11; effective date 10/1/11)
- NPRR451 Implementation of New P.U.C. Subst. Rule 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS) (approved 4/17/12)
- NPRR475 EPS Metering Exception for ERS Generation (approved 12/11/2012; effective date 1/1/13)
- NPRR501 Correct ERS Self-Provision Settlement Calculation (approved 12/11/2012; effective date 12/12/12)

Procurement History

Under current Protocols, ERCOT procures ERS three times annually for four-month Standard Contract Terms. Attachment B to this report provides detailed results of ERCOT's procurements of ERS for program year 2012, including:

- Descriptions of Standard Contract Terms and Time Periods
- Capacity procurements by Time Period and by Standard Contract Term, including the number of Megawatts (MW) procured and the total number of MW offered
- Number of procured ERS Resources
- Average size of procured ERS Resources
- Number of individual Sites submitted to ERCOT for resource identification
- Summary of final settlement costs of ERS, adjusted to account for ERS 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 Standard Contract Term, including average prices paid (in dollars per MW per hour).

Review of Effectiveness & Benefits

ERCOT Protocols authorize the deployment of ERS in Level 2 of an Energy Emergency Alert (EEA).[4] ERS was not deployed during the 2012 program year.

Availability

The ERCOT Protocols require each QSE to achieve a portfolio-level availability factor of at least 95% across committed Time Periods.[5] Portfolio-level availability factors are calculated by ERCOT Staff after the end of the Standard Contract Term by aggregating availability factors across resources in each QSE's portfolio; resource-level availability factors are calculated using aggregated site-level interval meter data for each ERS Resource. Any ERS Resource that

[3] See Protocols § 8.1.3.1.3.1(1)(a).

[4] See Protocols § 6.5.9.4.2(2)(a)(ii).

[5] See Protocols § 8.1.3.1.3.1(1)(a).

achieves an availability factor of less than 85% and that is part of a portfolio that achieves an availability factor of less than 95% is subject to suspension for one Standard Contract Term. Suspended ERS Resources are able to regain their eligibility to provide ERS only after submitting a corrective action plan to ERCOT and successfully completing a reinstatement test administered by ERCOT.

ERS Resources are also subject to annual unannounced Load-shed tests, and may be suspended for failing two consecutive Load-shed tests.[6] ERCOT Staff conducts this testing from the ERCOT Control Center by issuing a verbal dispatch instruction and also, as of June 2012, an XML instruction to each individual Qualified Scheduling Entity (QSE), just as ERCOT would do in an actual EEA event.

ERCOT maintains that this combination of performance metrics and penalties for non-compliance, which are among the most stringent for any demand response program in North America, provide substantial integrity to the ERS product.

Market Benefits

The Commission has previously recognized that a central purpose of ERS 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 [Load Resource] 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.[7]

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

- Growth. The number of ERS Resources and individual Sites participating in ERS, as illustrated in Slides 4 through 9 in Attachment B, continues to increase with each ERS Standard Contract Term. The average size of each ERS Resource has steadily decreased from 26 MW for the initial procurement down to 1 MW for the most recent procurement.

- Suspensions. A total of 47 ERS Resources with an approximate total capacity of 54 MW were suspended in 2012 for availability failures or for two consecutive load test failures.

- Offer behavior. ERCOT management, for economic reasons, declined to accept at least some ERS offers in two of the three ERS Standard Contract Terms in 2012. These

[6] See Protocols § 8.1.3.3(5).

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

decisions are illustrated in Slides 13 through 15 in Attachment B. While ample room remained under the annual $50 million ERS cost cap,[8] ERCOT management made these procurement decisions consistent with the guidelines published in the document entitled "ERCOT Process for Determining Contract Period Cost Limits and Reasonableness of Offers for Emergency Response Service."[9]

[8] See P.U. C. Subst. R. 25.507(b)(2).

[9] See http://www.ercot.com/content/services/programs/load/eils/ERS_k/Process_for_Determining_Cost_Limits_&_Reasonableness_of_Offe.pdf

ERCOT Emergency Responsive Service (ERS)

Report to the Public Utility Commission of Texas for the 2012 ERS Program Year

Project No. 27706

Attachment B

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Contents

Procurement Summary

- Capacity (MW) offered and procured
- Number of procured ERS Resources and average ERS Resource size
- Number of participating individual Sites

Suspensions Due to Availability or Load Test Failures

Settlement Summary

Detailed results by Standard Contract Term

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Standard Contract Terms & Time Periods

ERS is procured 3 times annually for 4-month Standard Contract Terms

- February through May
- June through September
- October through January

Participants may offer to provide ERS for one or more Time Periods:

- Business Hours 1: 8AM to 1PM Monday-Friday*
- Business Hours 2: 1PM to 4PM Monday-Friday*
- Business Hours 3: 4PM to 8PM Monday-Friday*
- Non-Business Hours: All other hours

***Except ERCOT Holidays**

Time Periods are designed to allow flexibility 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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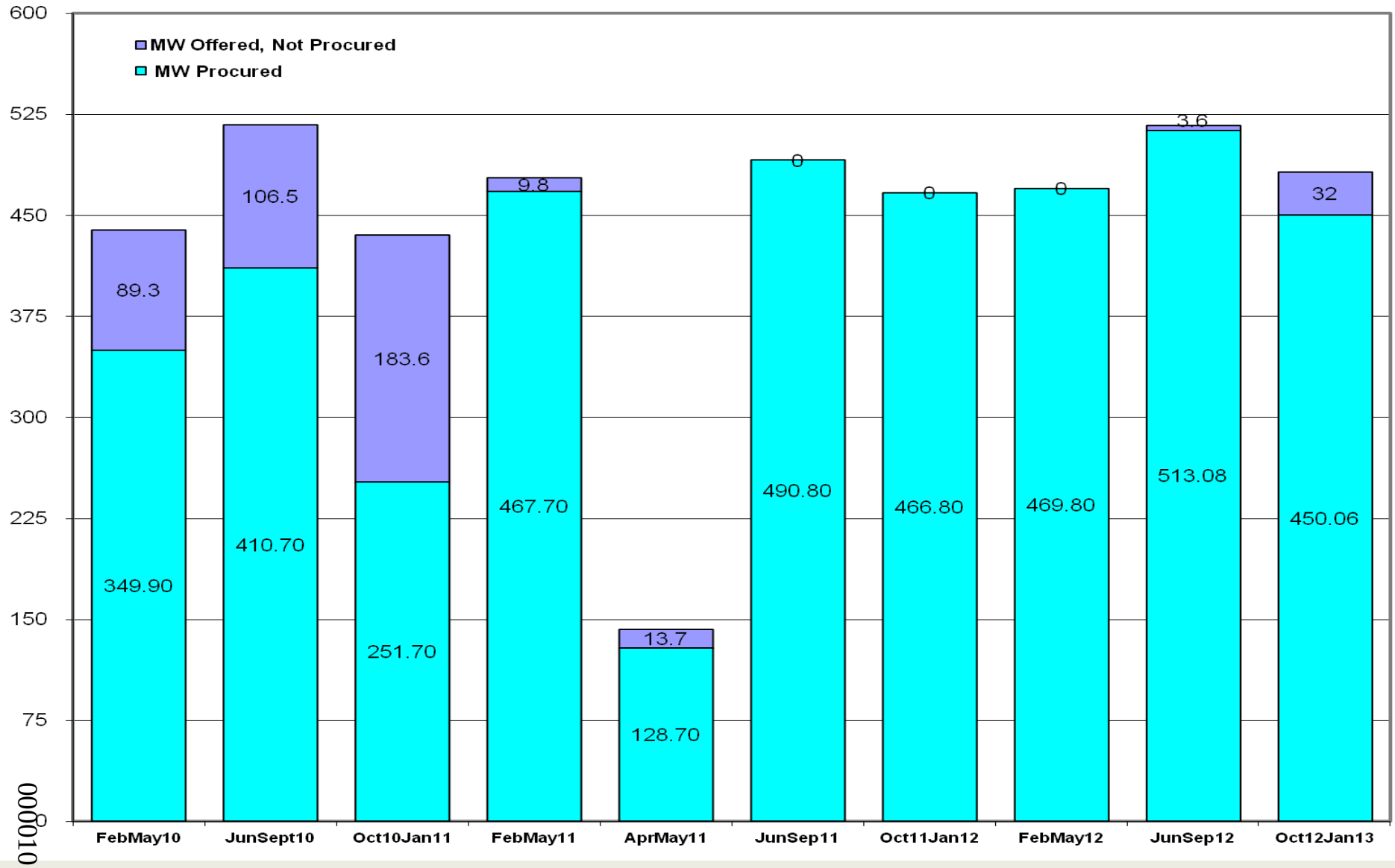
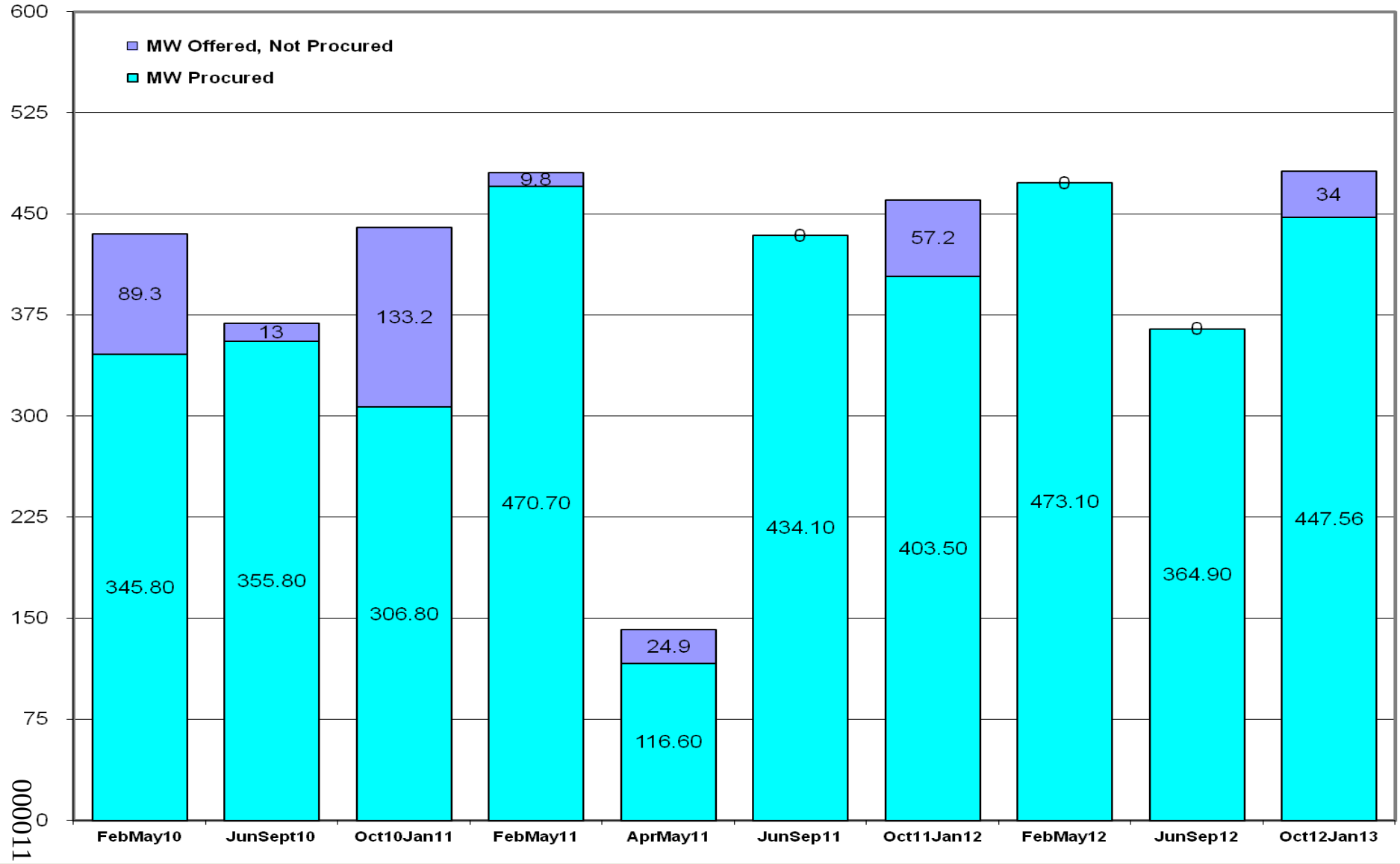
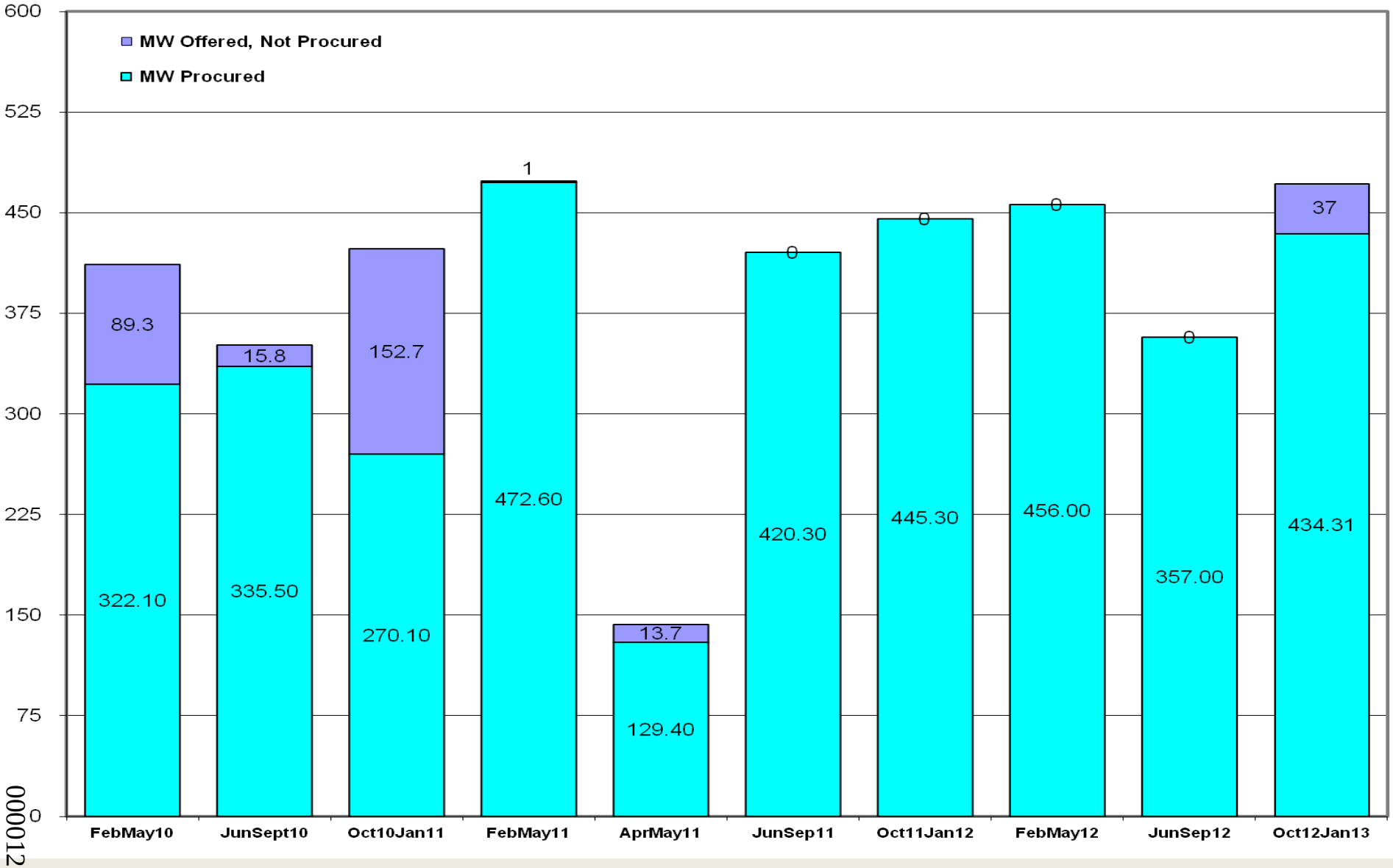
Capacity Procurement Trends (Business Hours 1)



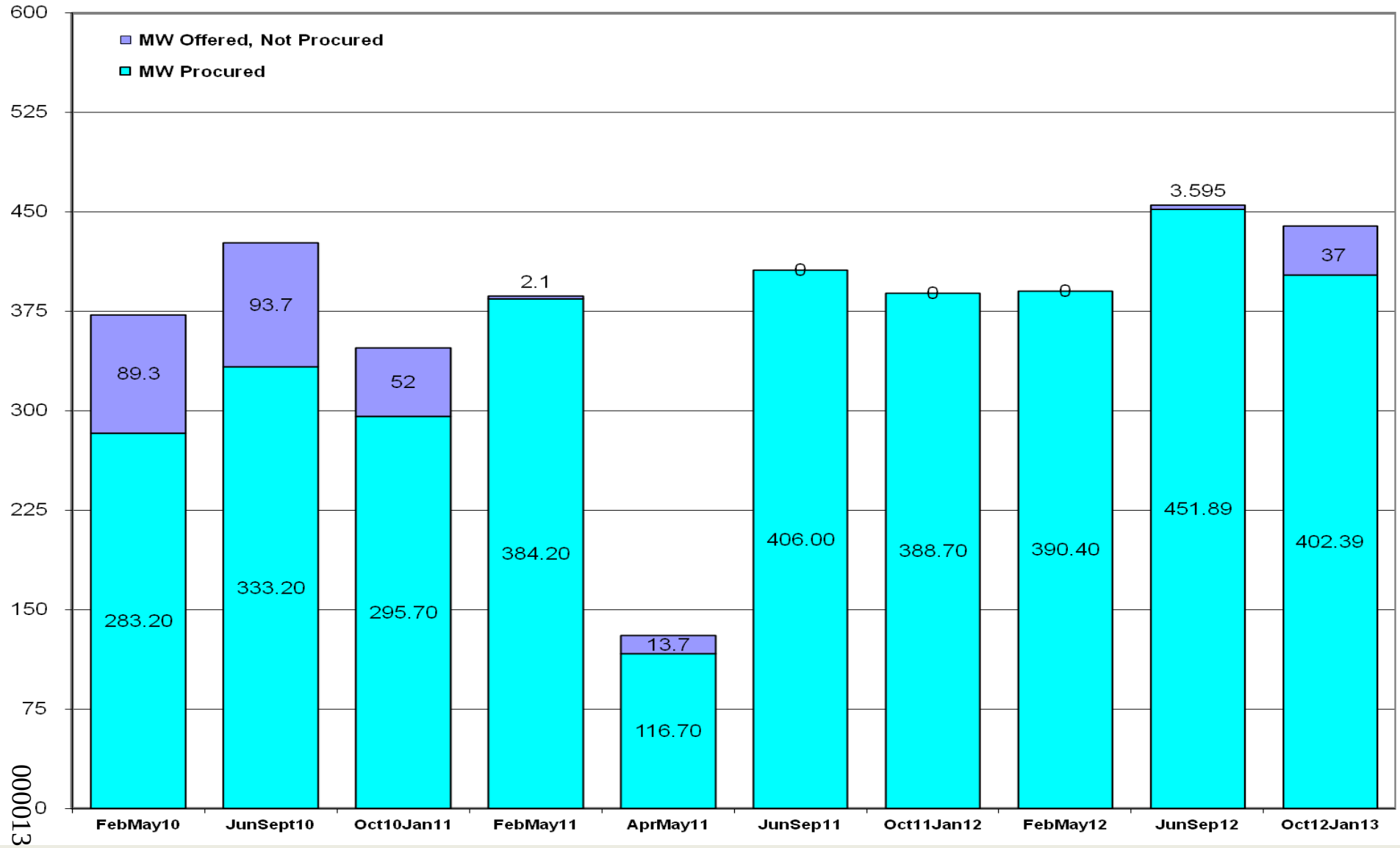
Capacity Procurement Trends (Business Hours 2)



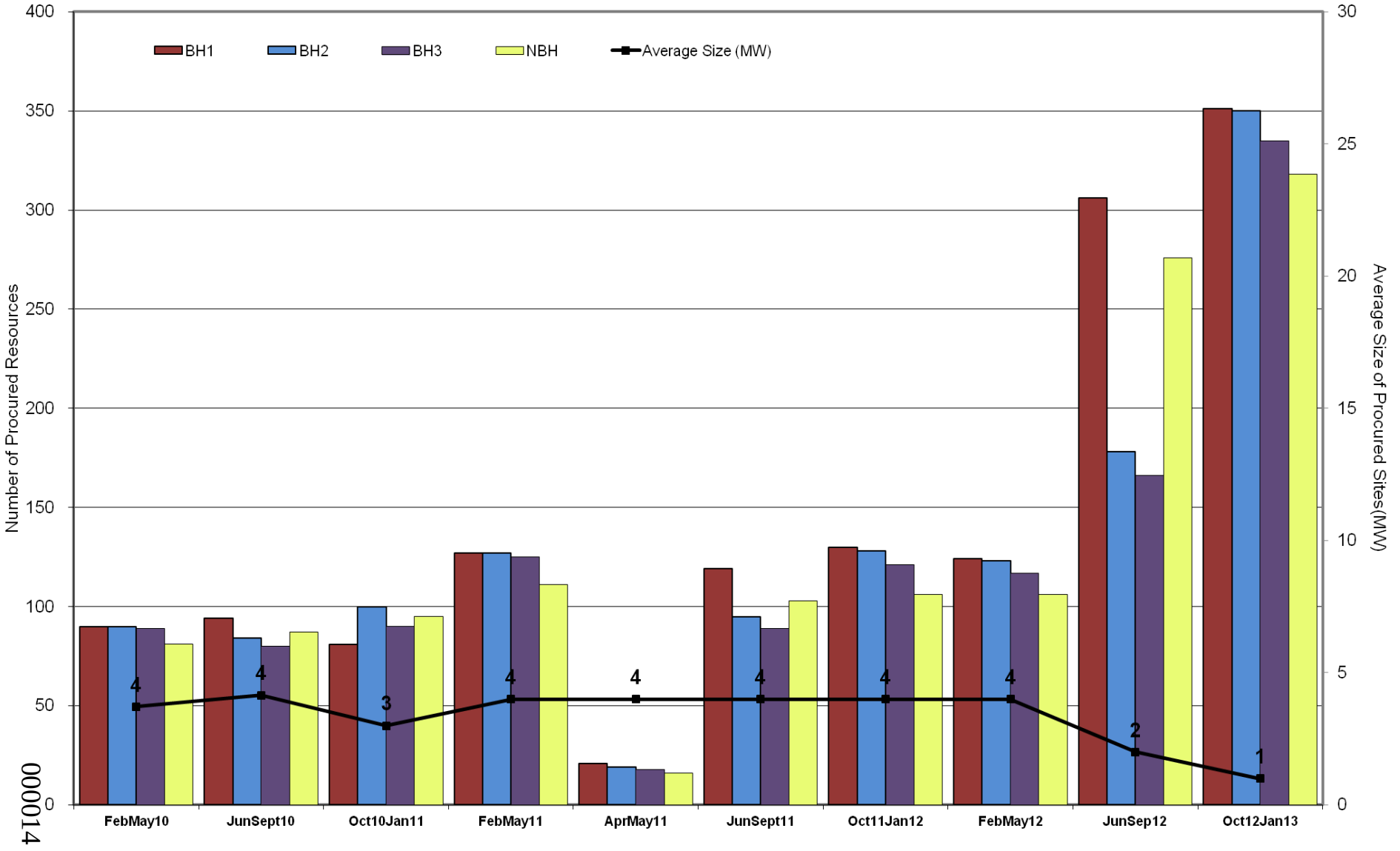
Capacity Procurement Trends (Business Hours 3)



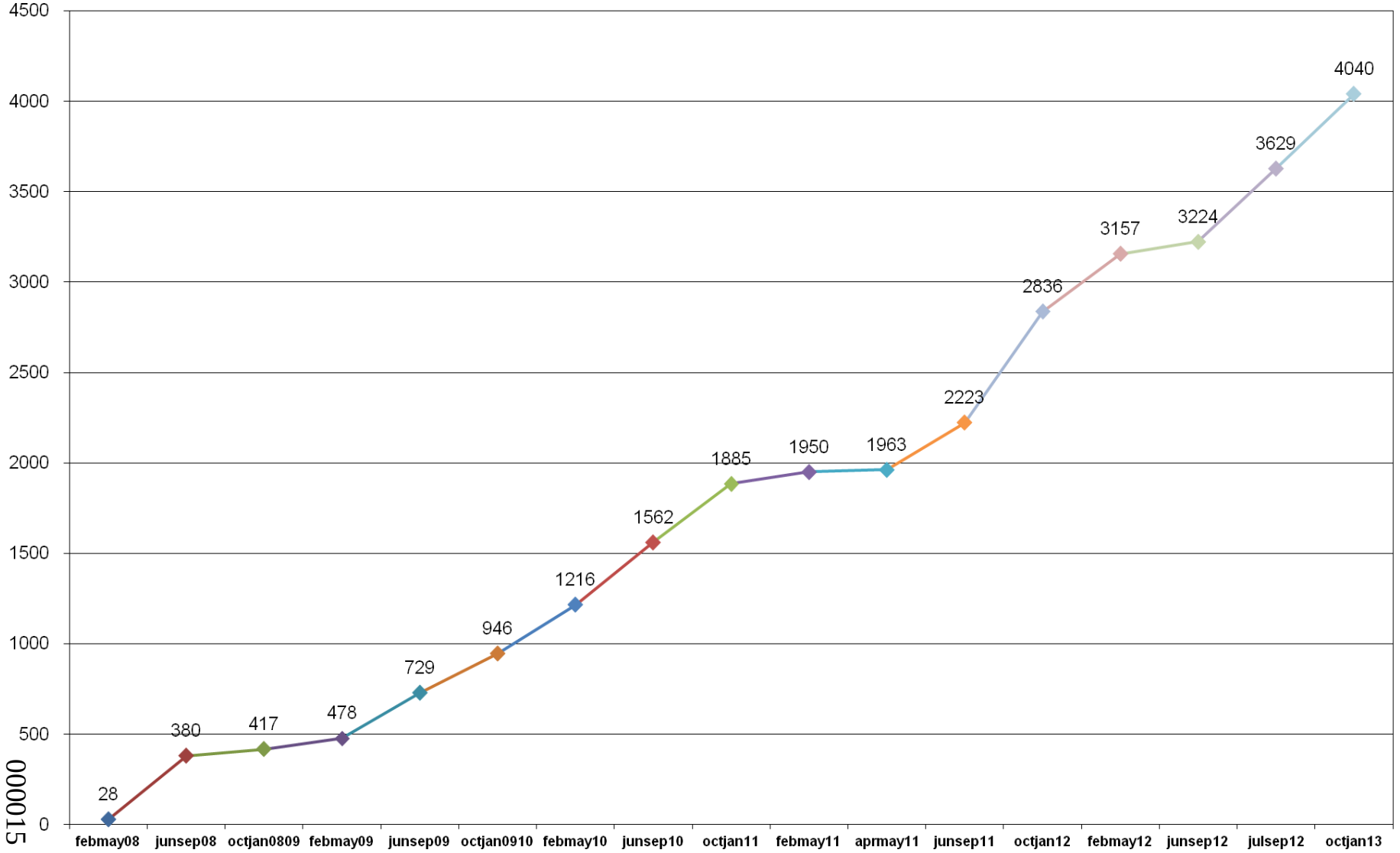
Capacity Procurement Trends (Non-Business Hours)



Procurement Trends (number & avg. size of Resources)



Cumulative Individual Sites Participation



Suspension History

ERS Resources suspended during the 2012 program year due to availability failures or two consecutive load test failures

Standard Contract Term	Reason for Suspension	No. of Resources	Approx. curtailable MW
Feb-May12	Availability	3	4
	Load Tests	6	14.3
June-September12	Availability	4	7
	Load Tests	7	18.1
October12-January13	Availability	0	0
	Load Tests	27	10.525

- Suspended Resources 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

Standard Contract Term	Projected cost based on procurement	Cost after adjustments *	Final *	Final % of original
FebMay09	$4,508,954.75	$4,198,560.86	$4,198,560.86	93.1%
JunSep09	$6,361,774.13	$6,142,071.95	$6,142,071.95	96.5%
Oct09Jan10	$7,789,961.33	$7,400,219.57	$7,400,219.57	95.0%
TOTAL 2009	$18,660,690.21	$17,740,852.38	$17,740,852.38	95.1%
FebMay10	$6,672,120.74	$6,379,578.38	$6,379,578.38	95.6%
JunSep10	$7,387,689.04	$7,273,204.86	$7,261,000.48	98.3%
Oct10Jan11	$5,956,301.01	$5,541,315.78	$5,541,315.78	93.0%
TOTAL 2010	$20,016,110.79	$19,194,099.02	$19,181,894.64	95.9%
FebMay11	$7,703,107.30	$6,581,603.30	$6,643,557.73	86.2%
AprMay11	$1,110,406.64	$1,091,783.88	$1,091,783.88	98.3%
JunSep11	$7,748,302.46	$6,780,901.29	$6,780,901.29	87.5%
Oct 11Jan12	$8,731,702.58	$8,364,694.14	$8,364,694.14	95.8%
TOTAL 2011	$25,293,518.97	$22,818,982.61	$22,880,937.04	90.5%
FebMay12	$8,903,726.90	$8,903,726.90	$8,832,429.67	99.2%
JunSep12	$11,621,720.72	$11,278,038.52		97.0%
Oct12Jan13	$10,246,067.12			Projected
TOTAL 2012	$30,771,514.74	$30,427,832.54	$30,356,535.31	98.7%

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***Adjustments may be made for the following reasons: availability, event performance, disputes, data corrections.**

2012 Results by Standard Contract Term

February-May 2012 Standard Contract Term

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	469.8 MW	473.1 MW	456 MW	390.4 MW
Capacity Offered	469.8 MW	473.1 MW	456 MW	390.4 MW
Number of Resources Procured (number of aggregations)	124 (85)	123 (84)	117 (79)	106 (74)
Avg. Cost MW / Hour	$7.31	$7.14	$7.84	$7.29

- **Projected Cost for this SCT: $ 8,903,726.90**

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June-September 2012 Standard Contract Term

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	513.1 MW	364.9 MW	357 MW	452 MW
Capacity Offered	516.7 MW	364.9 MW	357 MW	455.5 MW
Number of Resources Procured (number of aggregations)	306 (101)	178 (58)	166 (52)	276 (88)
Avg. Cost MW / Hour	$8.70	$9.67	$9.97	$8.83

Projected Cost for this SCT: **$ 11,621.720.72**

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October 2012-January 2013 Standard Contract Term

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	450.1 MW	448.0 MW	434.3 MW	402.4 MW
Capacity Offered	482.1 MW	482.0 MW	471.3 MW	439.4 MW
Number of Resources Procured (number of aggregations)	351 (88)	350 (87)	335 (82)	318 (79)
Avg. Cost MW / Hour	$8.23	$8.77	$9.06	$8.15

- **Projected Cost for this STC: $ 10,246,067.07**

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Disclaimer

This document is provided for informational purposes only. Procurement and settlement data may vary slightly from final numbers and are not intended to be used as official ERCOT reporting.

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