



Compliance Update

March 2006



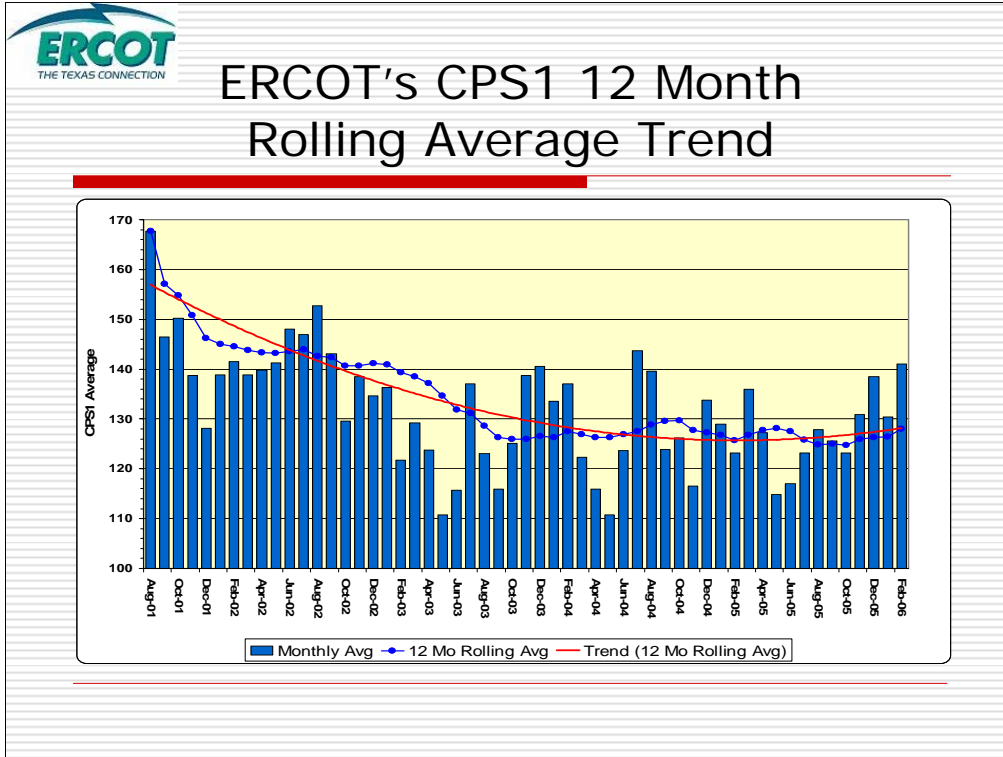
Control Performance Highlights

□ NERC CPS1 Performance

- ERCOT's February score was 141.06 which was the second best score in ~3½ years
- March thru June have typically been ERCOT's poorest performing months in last 3 years

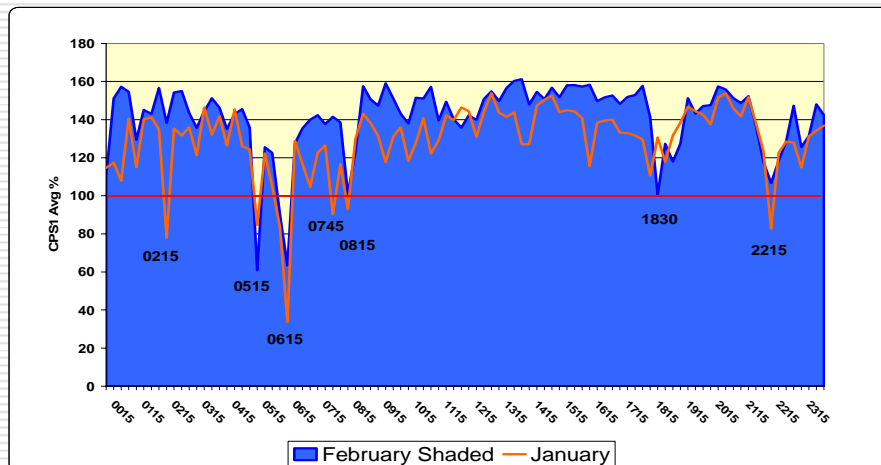
□ PRR 525 Performance

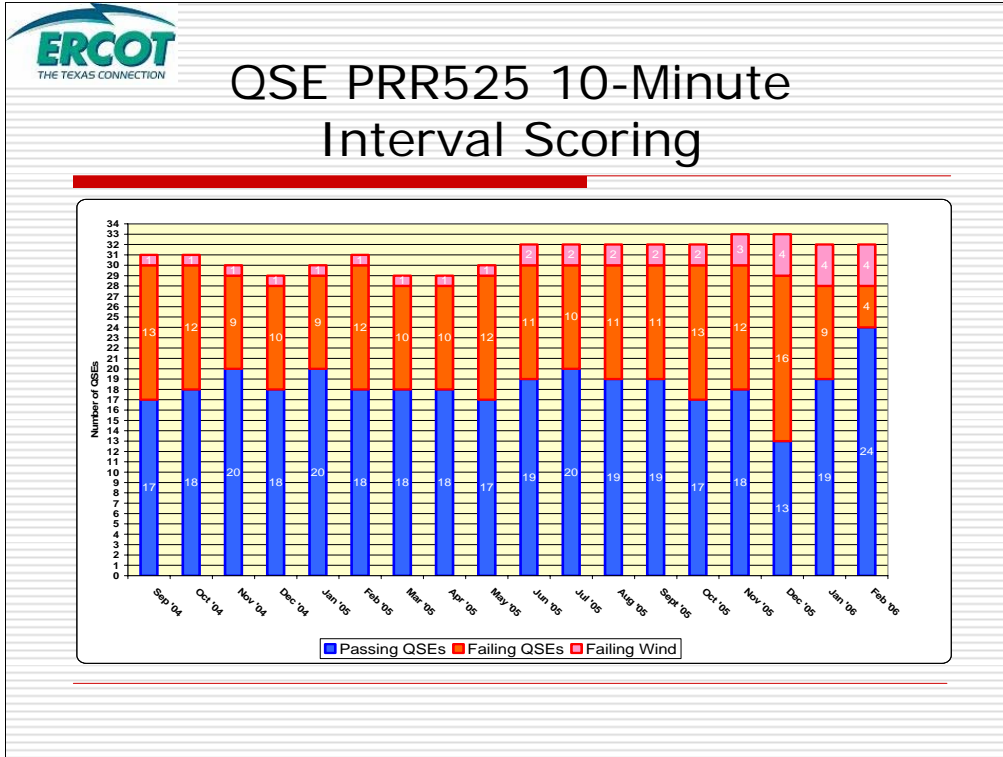
- 24 QSEs passed the measure in February – only 4 non-wind-only QSEs failed in February (preliminary)
 - January scores posted on the ERCOT Compliance Web Page
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ERCOT CPS1 by Interval

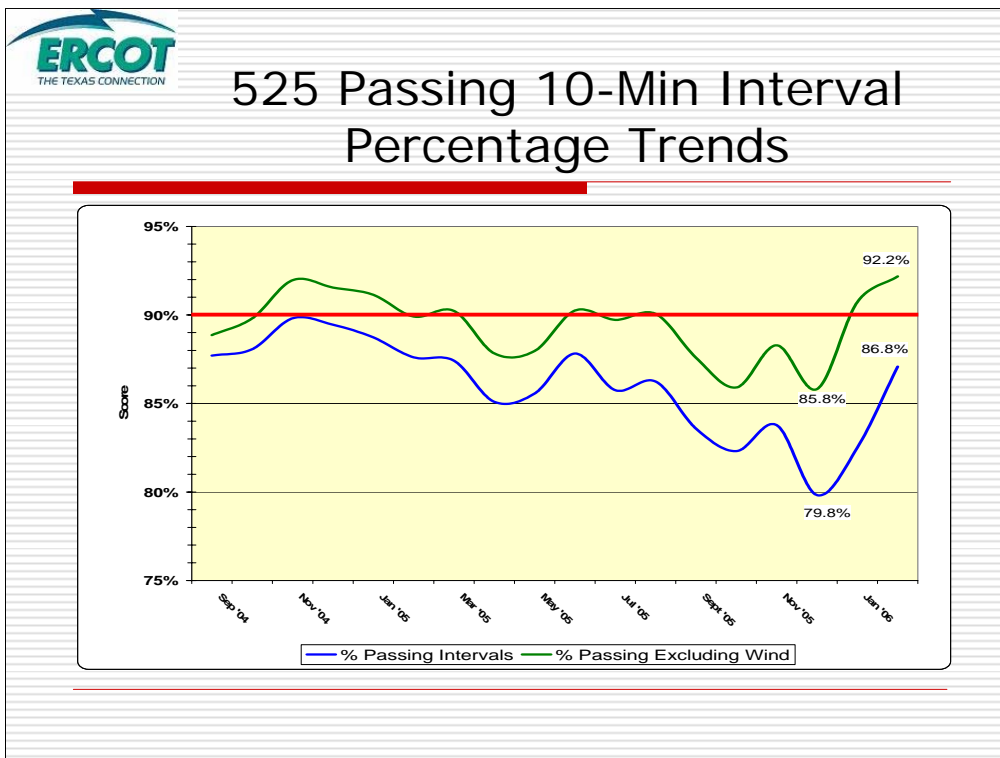







SCE Performance Monitoring

- SCE Performance Monitoring scores for all QSEs were published on the Compliance Website on March 8th
 - [January SCE Performance Scores](#)
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Resource Plan Performance Metrics

	DK	BH	BR	DE	CV	CD	AP	BP	FR	FY	BC	DA	CQ	AY	AO	CF	CJ	BY	FK
Resource Status	0.75	N/A	0.99	1.00	0.99	1.00	0.98	1.00	1.00	N/A	1.00	0.99	1.00	0.99	0.99	1.00	1.00	0.99	0.99
Resource LSL as % of HSL	0.96	N/A	0.99	0.99	0.88	0.98	0.98	1.00	1.00	N/A	1.00	0.99	0.91	0.99	1.00	0.99	0.98	0.96	1.00
DA Zonal Schedule	1.00	1.00	0.98	0.98	1.00	0.95	1.00	1.00	1.00	N/A	1.00	0.93	0.98	0.99	1.00	1.00	0.99	1.00	0.99
AP Zonal Schedule	0.99	0.98	0.91	1.00	0.97	0.99	1.00	1.00	1.00	N/A	1.00	0.99	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Down Bid & Obligation	0.90	0.85	0.76	0.80	0.59	0.80	0.85	0.87	0.89	N/A	0.98	0.96	0.96	0.99	0.90	0.99	0.98	0.97	1.00
Total Up AS Scheduled Obligation	N/A	N/A	0.98	1.00	0.98	1.00	0.92	0.96	N/A	0.87	0.95	0.96	0.97	0.99	0.99	0.99	0.99	1.00	1.00

	BX	CC	DF	BG	DP	AM	AR	ET	CX	AE	AB	HJ	CI	BE	AD	BF	FS	GH
Resource Status	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	N/A	1.00	N/A	1.00	N/A	1.00	N/A	1.00	1.00
Resource LSL as % of HSL	1.00	1.00	1.00	0.99	1.00	1.00	0.99	0.99	N/A	N/A	1.00	N/A	0.99	N/A	0.98	N/A	1.00	N/A
DA Zonal Schedule	1.00	1.00	1.00	1.00	1.00	1.00	1.00	N/A	N/A	N/A	1.00	1.00	0.99	1.00	0.98	0.99	0.97	N/A
AP Zonal Schedule	1.00	0.98	0.99	0.99	0.98	0.99	0.98	1.00	N/A	N/A	0.99	0.97	0.98	0.99	0.98	0.99	1.00	N/A
Down Bid & Obligation	0.99	0.99	0.93	0.99	0.93	0.98	1.00	1.00	N/A	N/A	0.97	0.97	0.97	0.98	0.99	0.99	N/A	N/A
Total Up AS Scheduled Obligation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Resource Plan Performance Scores shown are for February 2006.

These scores are preliminary and have not been reviewed by the QSEs.

QSE names have been replaced with two letter codes.

27 of 37 QSEs passed all of the Measures for which they were evaluated.

Failing QSEs have been categorized by background color:

- Light Green indicates they failed the measure for one month
- Yellow indicates they have failed the measure the last two months
- Orange indicates they have failed the measure the last three months
- Red indicates they have failed the measure the last four months

A Protocol Violation does not occur until the fourth consecutive month is failed.

Protocol 4.10 defines these measures in detail but a brief summary of each is below.

Resource Status – Compares hourly Resource Plan status to telemetry to ensure units are “online” or “offline” as indicated in the Resource Plan

Resource LSL as a % of HSL – Compares Low Sustainable Limit (LSL) to High Sustainable Limit (HSL) for each “Online” Resource in the Resource Plan to ensure units can be moved for Reliability needs

Day Ahead Zonal Schedule – Compares Average Energy Schedule to total Resource Plan MW per Zone using Day Ahead Data to ensure these values match within a tolerance

Adjustment Period Zonal Schedule – Compares Average Energy Schedule to total Resource Plan MW per Zone using Adjustment Period Data to ensure these values match within a tolerance

Down Bid & Obligation – Ensures QSEs bid their required amount of Down Balancing & have the room to cover their Down Regulation Obligation

Total Up AS Scheduled Obligation – Ensures QSEs have the ability to cover Up Regulation Service (URS), Responsive Reserve Service (RRS), & Non-Spinning Reserve Service (NSRS) using Resource Plan Data



Incident Investigations

- So far in 2006, ERCOT shift operators have escalated two incidents, both related to QSEs.
 - February 2nd – Protocol 4.3.4: A QSE shall maintain a 24/7 scheduling center with qualified personnel for the purposes of communicating with ERCOT....
 - Protocol Violation Notice issued
 - February 27th - Protocol 6.10.5.4: QSEs shall have Resources available to meet the schedule while adhering to the Responsive Reserve Service requirements....
 - Protocol Violation Notice pending
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Incident reports are meant to address situations that occur during shift operations. Incident Reports that are confirmed violations will be escalated as Protocol Violation Notices.



NEW Approved NERC Standards

- ☐ MOD-024 Verification of Generator Gross and Net Real Power Capability
- ☐ MOD-025 Verification of Generator Gross and Net Reactive Power Capability
- ☐ PRC-003 Regional Procedure for Analysis of Misoperations of Transmission and Generation Protection Systems
- ☐ PRC-004 Analysis and Mitigation of Transmission and Generation Protection System Misoperations
- ☐ PRC-005 Transmission and Generation Protection System Maintenance and Testing
- ☐ PRC-020 Under Voltage Load Shedding Program Database
- ☐ PRC-021 Under Voltage Load Shedding Program Data
- ☐ PRC-022 Under Voltage Load Shedding Program Performance

<https://standards.nerc.net/>

The NERC Board recently approved these standards. Implementation periods of four-six months are included; details are available on the NERC website. They are not included in this year's annual NERC compliance program but will be mandatory after the implementation period ends.

ERCOT ROS has agreed to have working groups review these. Some are already addressed in ERCOT practices; others may not be. These begin to include more and more participation from the generation owners into NERC standards.



New NERC Field Tests

- ☐ PRC-019 Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection
 - ☐ PRC-024 Generators Performance during Frequency and Voltage Excursions
 - ☐ MOD-026-1 Verification of Generator Excitation Systems and Voltage Control Model Data
 - ☐ MOD-027-1 Verification and Status of Generating Unit Frequency Response

 - ☐ Field tests are intended to improve the Standard before adoption
 - ☐ The ROS has agreed to participate
 - ☐ Generator Owner volunteers will be requested
 - ☐ ERCOT has participated in field tests before
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ERCOT ROS has agreed to participate. Volunteers from several generation owners will be requested. Initial work is developing Regional criteria – ERCOT has done some of this in the recent past. Field tests are meant to improve the standard prior to adoption.



Compliance Program Developments

- On January 31st, ERCOT filed its [Compliance Process](#) in response to PUCT Substantive Rule 25.503(j), after lengthy review with Commission Staff – Docket 32350 assigned.
 - Technical conference to be held on March 28th.
 - Deadline for initial written comments is April 7th.
 - [PUCT Interchange](#)
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Compliance Program Developments

- ❑ ERCOT Compliance presented information about its Compliance Enforcement Program to the NERC Board of Trustees Compliance Committee on March 15th.

 - ❑ ERCOT Compliance is currently registering ERCOT entities responsible for NERC Reliability Standards. This is in support of the NERC filing to be the Electric Reliability Organization (ERO).
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