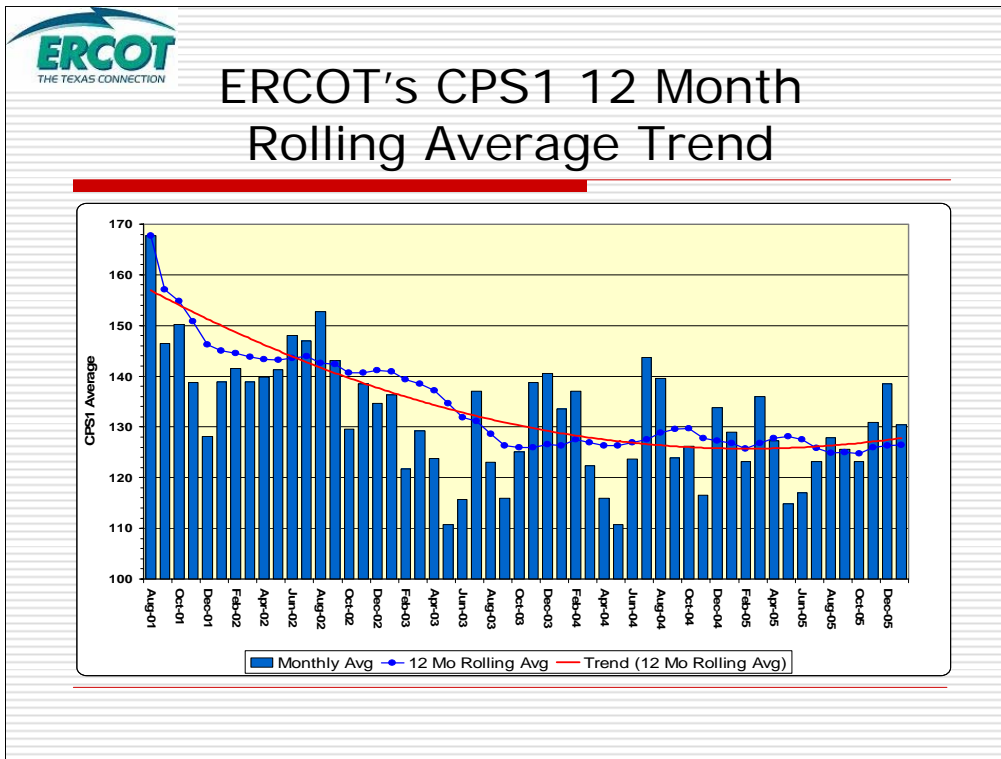




# Compliance Update

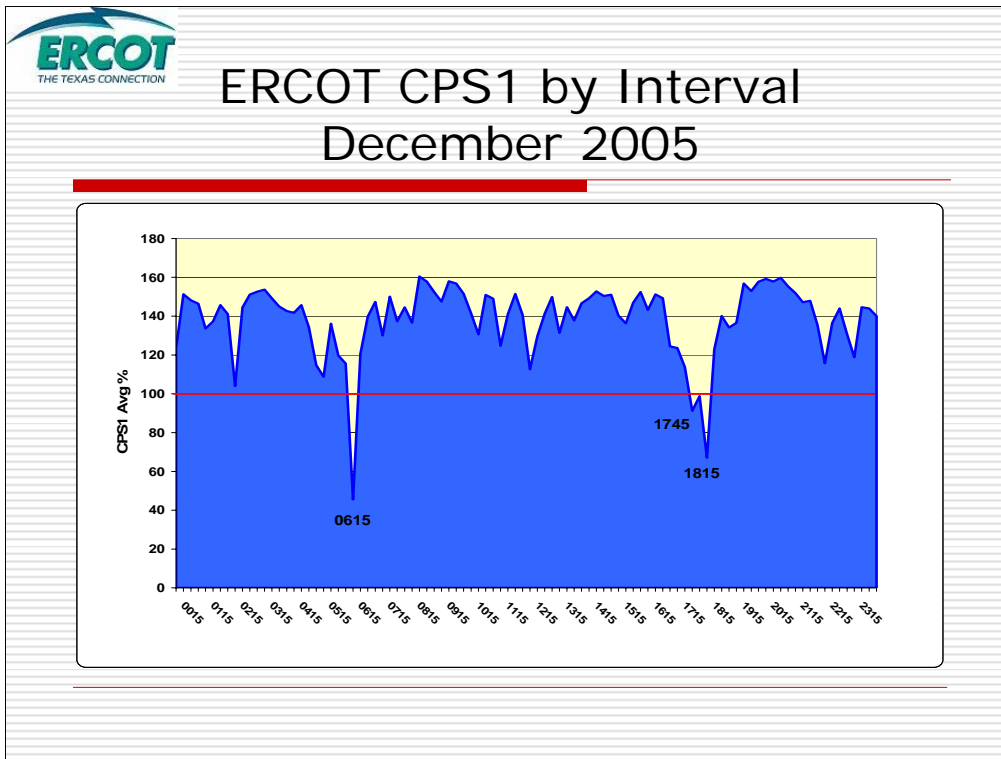
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February 2006



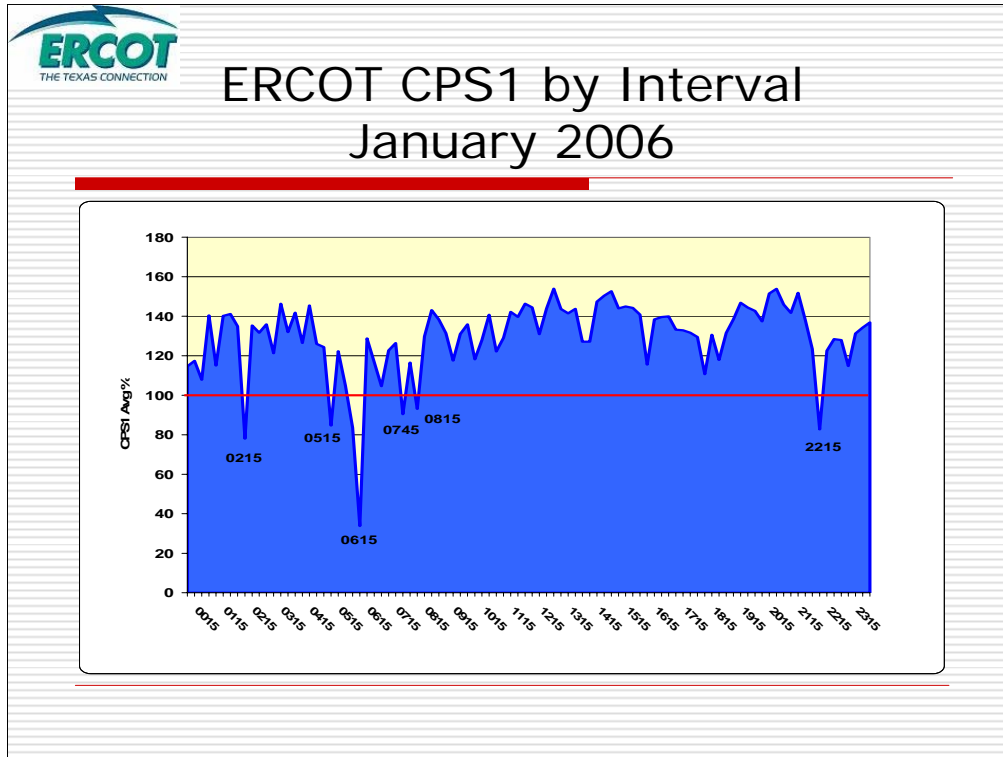
The Standard for CPS1 is 100% and is reportable to NERC as a 12-Month Rolling Average.

Since the NERC Measure is a 12 month rolling average, the effects of improving frequency performance will not be visible except over a long period of time.

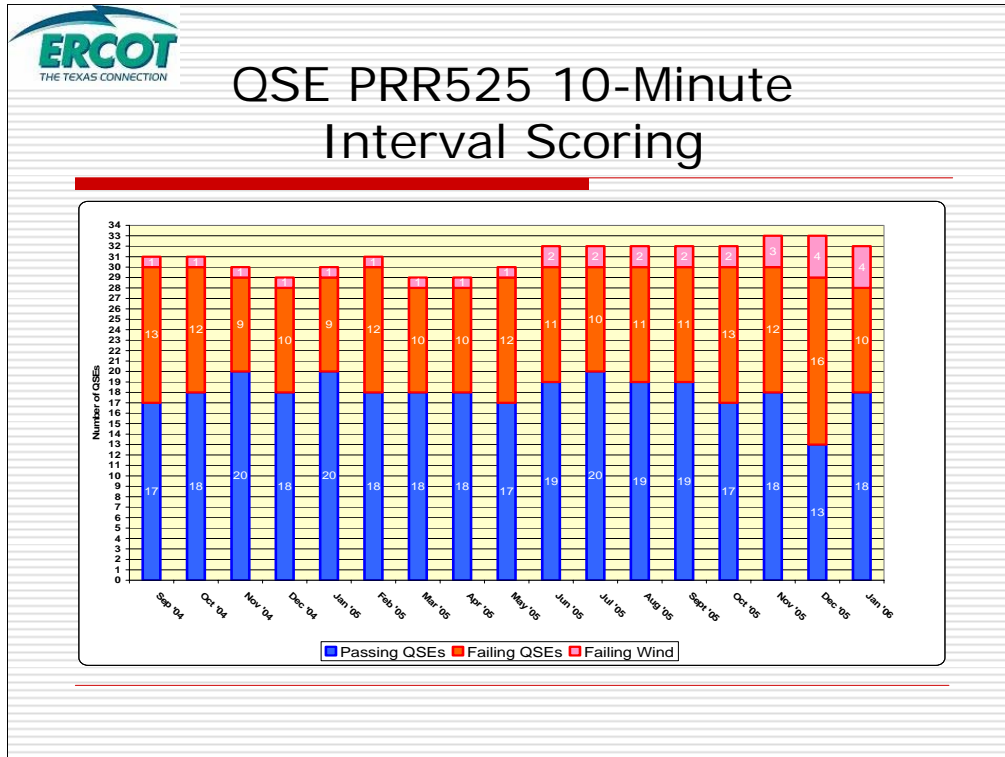


This is a visual representation of ERCOT's CPS1 monthly average by interval.

The minimum passing level is 100% and it is clear from this chart the times ERCOT struggles to meet this measure.



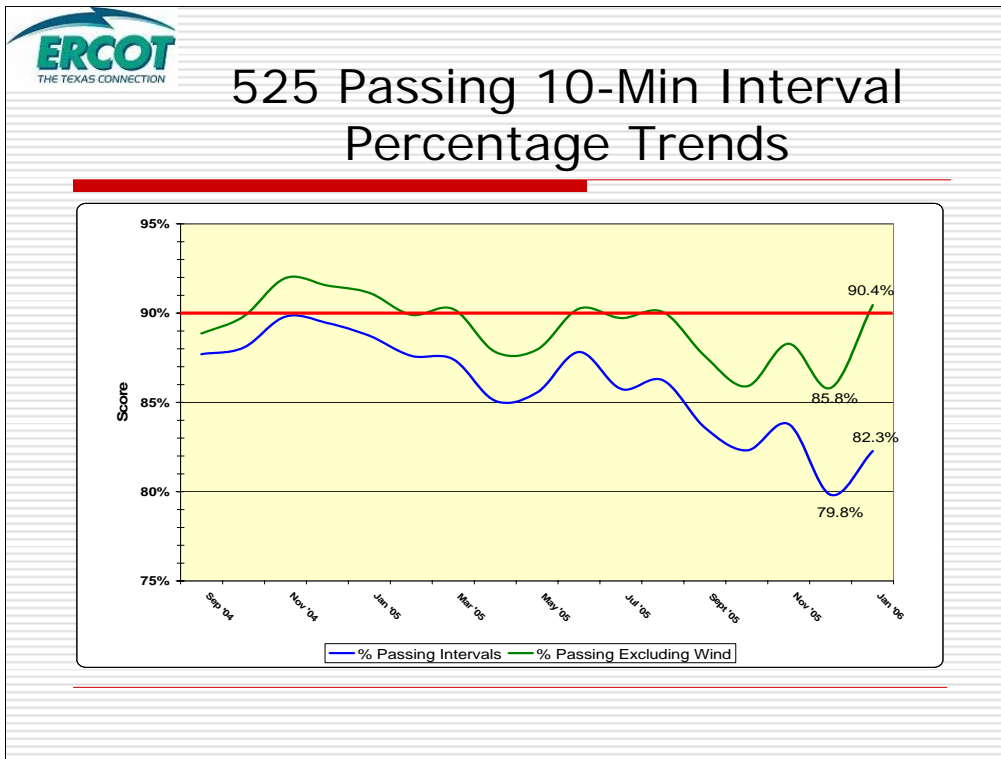
This is the same chart for January. Additional intervals where ERCOT failed CPS1 are clearly visible. Further review is required in order to understand what caused ERCOT to fall below the standard at other times.



PRR525 10-Minute Performance scores have been updated through January 2006.


The trend of QSEs failing the 10-minute standard improved from December's 20 failing QSEs back to 14 failing QSEs for January.

We expect to see continued score improvement once each QSE reviews their data and provides a mitigation plan for addressing performance issues.



This graph indicates a significant improvement in the number of passing 10-minute intervals from December to January.

We believe this graph more accurately reflects the efforts QSEs are making to meet the 525 measure.



### Resource Plan Performance Metrics January 2006

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	DK	CV	BY	DA	FS	DE	BH	FK	BR	BC	DP	AP	DF	CQ	FY	CJ	BX	AY	AO
Resource Status	0.73	1.00	1.00	1.00	1.00	1.00	N/A	0.99	1.00	1.00	1.00	0.98	1.00	1.00	N/A	1.00	1.00	0.99	0.99
Resource LSL as % of HSL	0.94	0.63	0.87	0.99	1.00	0.99	N/A	0.92	1.00	1.00	1.00	1.00	1.00	0.94	N/A	1.00	1.00	1.00	1.00
DA Zonal Schedule	0.97	1.00	1.00	0.88	1.00	1.00	0.98	0.98	0.91	1.00	0.99	1.00	1.00	0.99	N/A	1.00	0.95	0.96	0.96
AP Zonal Schedule	0.98	0.93	1.00	0.97	1.00	0.98	0.95	0.99	0.99	1.00	1.00	0.90	1.00	0.99	N/A	0.99	1.00	0.99	0.99
Down Bid & Obligation	0.91	0.93	0.98	0.93	0.58	0.76	0.82	0.86	0.86	0.88	0.90	0.92	0.95	0.98	N/A	0.99	0.96	0.98	0.96
Total Up AS Scheduled Obligation	N/A	0.97	1.00	0.98	N/A	1.00	N/A	0.99	0.93	1.00	0.88	0.91	0.96	0.96	0.98	0.99	0.99	1.00	1.00

	CC	BG	CD	AR	BP	AM	CF	ET	CX	AE	AB	AD	BF	CJ	BE	HJ	FR	CT
Resource Status	1.00	1.00	0.99	1.00	0.96	0.98	1.00	1.00	1.00	N/A	1.00	1.00	N/A	1.00	N/A	N/A	1.00	1.00
Resource LSL as % of HSL	1.00	0.99	0.95	0.99	1.00	1.00	1.00	1.00	N/A	N/A	1.00	0.95	N/A	0.98	N/A	N/A	1.00	N/A
DA Zonal Schedule	1.00	1.00	0.95	1.00	0.96	1.00	0.99	N/A	N/A	N/A	0.99	1.00	1.00	1.00	0.97	1.00	1.00	N/A
AP Zonal Schedule	0.98	0.99	0.99	0.98	0.99	0.99	0.98	N/A	N/A	N/A	0.96	0.97	0.96	0.98	0.99	0.99	1.00	N/A
Down Bid & Obligation	0.95	1.00	0.95	1.00	0.93	0.97	0.99	N/A	N/A	N/A	0.95	0.97	0.98	0.99	0.99	1.00	1.00	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	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Resource Plan Performance Scores shown are for January 2006. These scores are preliminary and have not been reviewed by the QSEs. QSE names have been replaced with two letter codes. 26 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

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- ❑ In all of 2005, ERCOT shift operators escalated twelve incidents. 9 issued to QSEs, 3 to TOs.
- ❑ ERCOT refined the process in mid-2005 and trained personnel.
- ❑ Four incidents were not clear Protocol violations; nevertheless ERCOT and market participants reviewed the situation and applied what was learned.
- ❑ One incident so far in 2006 involved lack of qualified personnel at a QSE to modify DC tie schedules.


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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.

The process didn't get into gear until mid-year, which explains why more occurred in the last part of the year. Last incident came from Engineering, not Operations, which indicates additional support for the process.

9 involved QSEs, 3 TO's. 8 of the 12 were determined to be violations of Protocols. Reserve capacity figured in 6 of the 12; lack of qualified personnel in 3 of 12; the 3 TO incidents were related to outage coordination.





## Generator Role in Operations

These 2005 compliance activities drew attention to generator obligations to support reliability, directly or in cooperation with their QSEs:


- Monthly PRR525 notification
- 2005 QSE audits reviewed QSE authority, performance monitoring, and communication with generators
- 2005 Reactive Testing
- ERCOT self-certification of up-to-date generator models for ERCOT studies

Monthly PRR 525 performance notification to QSEs has encouraged dialogue between QSEs and their generators about their Schedule Control Error (SCE) obligation and other operational responsibilities. More than one QSE has conducted meetings recently with its generators to find performance improvements.

2005 QSE audits conducted by ERCOT Compliance showed instances lacking clear, detailed documentation of authority and communications between QSEs and their generation portfolio related to grid operations. The audits also exposed the need for improvements to tools and training of personnel to meet ancillary service performance criteria based on SCE.

2005 Reactive Testing further showed lack of knowledge of ERCOT requirements, and issues with communication between ERCOT, QSE, and Resource Entities regarding another obligation of generators.

ERCOT Compliance obtained self-certifications from all Resource Entities owning generation that they had provided up-to-date models for ERCOT studies. Generator understanding of their obligation to provide and update these models is lacking in many cases.



## Compliance Program Developments

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- ERCOT filed its Protocol-based [Compliance Process](#) in response to PUCT Substantive Rule 25.503(j), after lengthy review with Commission Staff.
- ERCOT Compliance will present information about its Compliance Enforcement Program to the NERC Board Compliance Committee in March.
- Regarding the Electric Reliability Organization (ERO) specified in the Energy Policy Act of 2005:
  - Federal Energy Regulatory Commission (FERC) final rule on certification of the ERO, [Order 672](#), has been issued.
  - NERC is working on its [ERO application](#) for filing in March 2006.
  - In support, ERCOT Compliance will register ERCOT entities responsible for NERC Reliability Standards in March.

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Hyperlinks to these documents are included in the slide.