

## PRR Comments

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| <b>PRR Number</b> | 833 | <b>PRR Title</b> | Primary Frequency Response Requirement from Existing WGRs |
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| <b>Date</b> | May 11, 2010 |
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| Submitter's Information |  |
|-------------------------|--|
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| <b>Market Segment</b>   | Not applicable   |

| Comments |
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| <b>Overall Market Benefit</b> | See 833PRR-28a Wind Coalition Comments 051110  |
| <b>Overall Market Impact</b>  | See 833PRR-28a Wind Coalition Comments 051110. |
| <b>Consumer Impact</b>        | See 833PRR-28a Wind Coalition Comments 051110  |

The Wind Coalition submits comments to PRR833 as presented in "833PRR-28a Wind Coalition Comments 051110".

| Revised Proposed Protocol Language |
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None at this time.

# PRR 833

## Wind Coalition Comments

Requiring Expensive Retrofits  
Without Justification Is Bad Policy

Reject PRR 833

# PRR 833 Requires Retrofits With No Demonstrated Reliability Need

- PRR 833 Requires Unnecessary Retrofits
  - Imposing additional costs on existing Resources
- The wind industry has demonstrated its willingness to support system reliability
- Requiring Retrofits Absent a Showing of Need is Bad Policy
  - Retrofits raise costs after investments have been made
  - Existing ERCOT Protocols grandfather Resources, when there was no demonstrated need for retrofits

# PRR 833 Unarguably Requires Retrofits

- Existing WGRs are not designed to sense or respond to frequency
- Some existing WGRs can acquire that capability with equipment and control system upgrades from turbine manufacturers
  - Technology will not be proven
  - Vendor guarantees or warranties may not be available
  - total cost cannot be controlled

# WGRs Supported New Requirements for Existing and New WGRs

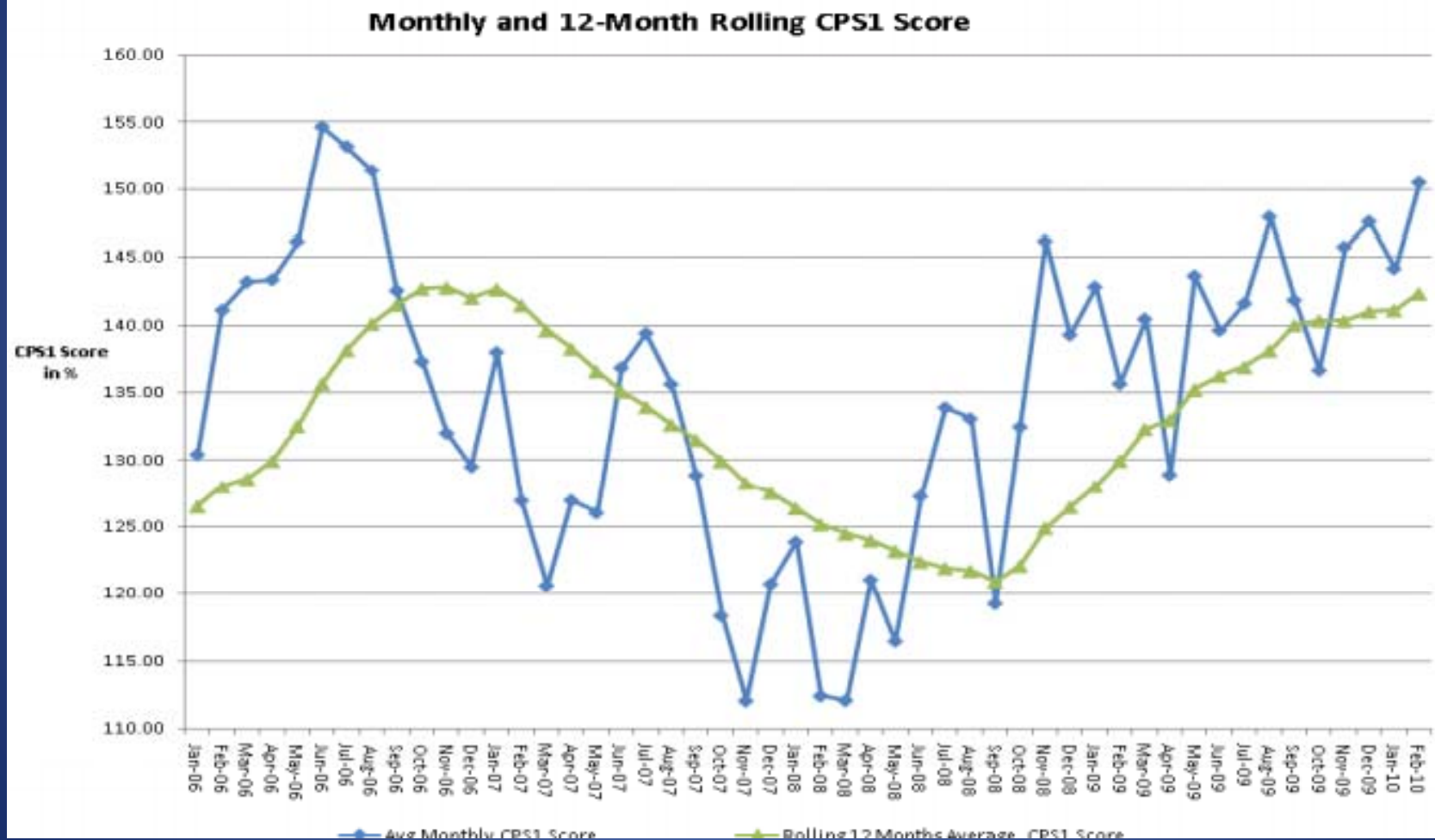
- OGRR 208 defined Voltage Ride-Through (VRT) requirements for WGRs with IA's signed after Nov 1 2008
- OGRR 208 initiated studies to determine the VRT need associated with existing WGRs
- PRR 824 requires WGRs with IA's signed after January 1, 2010 to have control systems that provide the equivalent of a 5% droop rate
- PRR 763 replaced WGR QSE wind-power schedules with ERCOT wind-power forecast
- PRRs 771 & 788 imposed ramp rate limitations on new and existing WGRs
- PRR 794 required all WGRs to accelerate implementation of nodal telemetry standards
- PRR 793 clarified definitions and performance measures for WGR scheduling practices

# PRR 833 Retrofits Are Not Necessary for Network Reliability

- Existing WGRs were designed, constructed and interconnected in compliance with Protocols
- No study has been put forth showing any need for PRR 833
- All new WGRs will have primary frequency response to meet anticipated future needs
- The ERCOT network has operated reliably with existing WGRs



## CPS1 Scores Improving Due to Governor Tuning and Reduction in Non-Conforming Load



# ERCOT Protocols Have Recognized the Need for Grandfathering

- Absent any demonstration of need the current protocols have not required retrofits for:
  - Reactive requirements for conventional generators in service before September 1, 1999
  - Reactive requirements for WGRs in service before February 17, 2004
  - Power System Stabilizers for conventional generators in service before January 1, 2008



# New Resources Can More Effectively Respond To New Requirements

- Investors will know the cost to comply
- Equipment that cannot respond to the new requirements will simply not be purchased
- Cost of new features will be controlled by equipment vendor competition
- Vendors will be providing comprehensive performance guarantees and warranties

# Reject PRR 833

- A higher standard must be met to require existing facilities to meet new requirements
- Existing WGRs are NOT asking to be grandfathered
- Requiring existing WGRs to provide primary frequency response must await a demonstration of the need