PRR803 14 Minute Ramp Period Testing Market Participant Handbook

Version 1.0

June 18, 2009

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1 Introduction

This Protocol Revision Request (PRR803) was proposed by the Independent Market Monitor (IMM) and advocated by the Public Utility Commission of Texas (PUCT) to change the ramping period for Balancing Energy Service (BES) deployment for Base Power Schedule Calculation and Balancing Energy Power Schedule from ten (10) minutes to fourteen (14) minutes. This will allow more BES to be deployed and is expected to improve Dispatch efficiency.

ERCOT currently balances load and generation every fifteen (15) minutes. Qualified Scheduling Entities (QSEs) are sent a BES Deployment that they must meet in any fifteen (15) minute interval. Five (5) minutes before the interval, QSEs begin ramping to their next BES Deployment. QSEs continue ramping for ten (10) minutes and for the five minutes in the middle of a fifteen (15) minute interval, QSEs hold their BES Deployment at a constant level. Since QSEs are only ramping for ten (10) minutes, ERCOT is limited to deploy BES to a QSE at ten (10) times the QSE's ramp rate plus the level of their last deployment.

QSEs/sub-QSEs are not required to participate in testing with ERCOT. However all QSEs/sub-QSEs will be required to submit documentation to ERCOT stating that their systems are ready for implementation of PRR803. This must be done by the end of the testing period, 9/30/2009.

1.1 Market Participant 14-Minute Ramp Period Handbook

Because PRR803 requires successful deployment across the market, the Market Participant 14-Minute Ramp Period Handbook has been created to provide a detailed testing guide. The Handbook is a guiding document to help Market Participants (MPs) understand how to prepare, participate, and engage in 14-Minute Ramp Period testing.

The detailed testing activities and schedule will be completed by working collaboratively with ERCOT subject matter experts and MP Representatives.

1.2 Document Topics

It is critical that all participants have a common understanding of testing activities, start dates, and participation expectations. This document will cover the following topics to ensure that ERCOT and MPs are ready:

- Arranging test times
- Options for QSEs/sub-QSEs desiring to test with ERCOT
- Testing requirements and activities
- Evaluation of the tests
- Requirements for QSEs/sub-QSEs opting to test with ERCOT
- Required documentation from all QSE/sub-QSEs, whether they have tested with ERCOT or not

2 Coordinated Test Details

Testing is initiated by QSEs who wish to participate. The 14-Mintue Ramp Period testing window is 07/01/09 through 09/30/09 between the hours of 9:00 and 16:00 during business days. Individual QSEs must contact ERCOT to arrange to be a testing participant according to prescribed timelines. The schedule allows for each test to take up to one (1) hour, but it is expected that the test will take only thirty (30) minutes. Only a single QSE/sub-QSE will be allowed to perform testing during a given time. Sub-QSEs who desire to test their systems will do so separate from the main QSE.

Each QSE/sub-QSE should only be scheduled for a single test at a time. If a QSE/sub-QSE determines that their test was unsuccessful or additional changes have been made to their systems, additional test times may be arranged within the test dates and according to the steps below.

2.1 Preparation Overview

- All QSEs/sub-QSEs who desire to test their systems must contact their ERCOT Wholesale Account Manager. Test dates, times and other test details will be arranged between the QSE/sub-QSE, the QSE's ERCOT Wholesale Account Manager, and an ERCOT Test Coordinator. A calendar will be available to the ERCOT Wholesale Account Managers and ERCOT Test Coordinators to determine available test times. A QSE will be responsible for communicating and making any necessary arrangements with the Resource Entities it represents.

- All test times must be tentatively scheduled at least seven (7) days prior to the day of testing. Times may be adjusted due to unforeseen circumstances such as adverse system conditions.

- It is the responsibility of the QSE/sub-QSE to determine the method through which they will be receiving BES instructions during testing. This information should be communicated to the ERCOT, through the ERCOT Wholesale Account Manager, at least two (2) business days prior to the scheduled day of testing. Regardless of which option is chosen, all QSEs/sub-QSEs should submit BES bids as they would on a normal day. QSEs/sub-QSEs have two options for performing their system test:

    1. They may test using BES deployments received from ERCOT through the BES Market. It is expected that BES bids will be submitted in the usual fashion and no changes will be made by ERCOT.

    2. They may receive BES deployments in the same way that deployments are received during BES Ancillary Service (AS) qualification testing. In this case, the QSE/sub-QSE will coordinate with ERCOT the MW amount to be deployed during testing. The QSE/sub-QSE will be placed in test mode by an ERCOT Operator and will not receive BES deployments from the BES Market during the test time.

- Regardless of which option is chosen, QSE/sub-QSEs will still be able to provide AS during the testing period. If the second option is chosen, the proposed MW deployment for testing may need to be reviewed following the clearing of the AS Market to ensure that the AS can be expected to be available.

- A Verbal Dispatch Instruction (VDI) will be issued to the QSE/sub-QSE under test relieving them of any deviation charges. However, a VDI will not be issued to relieve any AS obligations during the test.

- Another part of PRR803 is that Base Power Schedules will be calculated assuming fourteen (14) minute fixed ramping periods. This will also be the case for ERCOT's evaluation of the test.

2.2 Test Requirements

- The QSE/sub-QSE must schedule the test with ERCOT according to the prescribed timelines.

- The QSE/sub-QSE must specify the method through which they will receive BES instructions during the test and must confirm the proposed amount of MWs to be deployed if the second option is chosen.

- The QSE/sub-QSE is expected to make available all online generation resources for the test because Base Power Schedules will be recalculated assuming fourteen (14) minute fixed ramping periods.

- QSEs/sub-QSEs will need to have generation resources online to participate in the test.

2.3 Test Activities

Test Structure

- A test window of one (1) hour is planned for each test. The actual test should take no more than thirty (30) minutes but extra time is allowed to accommodate any unforeseen circumstances and to allow the QSE/sub-QSE to perform system tuning.

- ERCOT will send the testing participant a VDI relieving them of any deviation charges. This VDI will be given fifteen (15) minutes before the test begins and will end fifteen (15) minutes after the test completion.

- An ERCOT Test Coordinator will be available for communication with the QSE/sub-QSE during the test time. The QSE/sub-QSE must communicate to the Test Coordinator when they have started operating to a fourteen (14) minute ramp and when they have switched back to operating to a ten (10) minute ramp. The QSE/sub-QSE will be provided with contact information for the ERCOT Test Coordinator prior to the day of testing.

- After completion of the test, ERCOT will collect and share the test data along with an evaluation of the results for each test with the QSE/sub-QSE.

Test Procedure

- ERCOT will send the testing participant a VDI relieving them of the Uninstructed Deviation Charge (URC) for the test time. The VDI will be effective fifteen (15) minutes before the start of the test and will clearly note that the QSE is participating in 14 minute ramp period testing.

- If the QSE/sub-QSE has selected to receive pre-determined BES deployments in the same manner that deployments are received during BES AS qualification tests, the QSE/sub-QSE will be placed in test mode. This will result in the QSE/sub-QSE not receiving BES deployments from the BES Market during the test time.

- Once the test is started, the QSE/sub-QSE will make any necessary changes to their systems to begin operating to a fourteen (14) minute ramp. The QSE/sub-QSE will communicate to the ERCOT Test Coordinator when the changes have been made.

- The QSE/sub-QSE will receive BES deployments based on the option they have selected and operate to the fourteen (14) minute ramps for approximately thirty (30) minutes.

- The QSE/sub-QSE will make any necessary changes to their system to again operate to a ten (10) minute ramp. The QSE/sub-QSE will communicate to the ERCOT Test Coordinator when the changes have been made.

- If the QSE/sub-QSE was placed in test mode for the test, they will then be taken out of test mode.

- The VDI will end fifteen (15) minutes after the test has been completed.
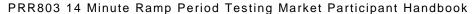
After the Test

- ERCOT will collect and share the test data along with an evaluation of the results for each test with the QSE/sub-QSE.

- Any QSE/sub-QSE receiving a VDI for the purpose of performing testing for PRR803 will be required to submit documentation to ERCOT stating whether or not they believe their systems are ready for PRR803 implementation. This must be done within ten (10) business days of the day the VDI was issued. If the QSE/sub-QSE believes that their systems are ready for PRR803 implementation, they should put the document found in Appendix A of this handbook on their company letterhead and submit it to their ERCOT Wholesale Account Manager. If they do not believe their systems are ready, the QSE/sub-QSE must send an email to their ERCOT Wholesale Account Manager and the ERCOT Test Coordinator for their test stating such and may begin the process by scheduling an additional test if desired.

2.4 Test Schedule

- 14-Minute Ramp Period testing will be available during business days beginning 07/01/09 and ending 09/30/09. QSEs/sub-QSEs choosing to test with ERCOT are expected to arrange to test between these dates.

- All QSEs/sub-QSEs are required to submit documentation stating that their systems are ready for implementation of PRR803. This includes both QSEs/sub-QSEs who tested their systems as described here and those who chose not to do so. A template of this document can be found in Appendix A of this handbook. A signed copy of this document on company letterhead must be submitted by each QSE/sub-QSE to their ERCOT Wholesale Account Manager by the end of the testing period, 9/30/2009. The current proposed implementation date is 10/29/2009. As previously stated, QSE/sub-QSEs who have performed successful tests with ERCOT are required to submit their documentation within ten (10) business days of the day of testing.

2.5 Test Evaluation

- After completion of the test, ERCOT will collect the test data using PI.

- Base Power and Balancing schedules will be recalculated to assume 14 minute ramps, as per PRR803.

- ERCOT will recalculate SCEs using the adjusted schedules.

- During this time, the QSE/sub-QSE should also perform its own evaluation of the test.

- ERCOT will share its test data and evaluation of the results for each test with the QSE/sub-QSE.

- Any QSE/sub-QSE receiving a VDI for the purpose of performing testing for PRR803 will be required to submit documentation to ERCOT stating whether or not they believe their systems are ready for PRR803 implementation within ten (10) business days of the day the VDI was issued.

- If a QSE/sub-QSE determines that they would like to re-test their systems, they will need to contact their ERCOT Wholesale Account Manager to arrange another test time. They may submit their request for re-testing at the same time that they submit the required test evaluation documentation.

Appendix A

QSE Acknowledgment

INSERT QSE IDENTITY hereby acknowledges that it will be able to comply with the requirements of PRR 803, which are reflected in revisions to Protocol Sections 6.5.2 Balancing Energy Service, 6.8.1.15.3 Uninstructed Charge Methodology and Equation, 6.10.4.2 Base Power Schedule Calculation, 6.10.4.3 Balancing Energy Power Schedule, on or before the effective date of October 29, 2009.

This acknowledgement is solely intended to provide notice to ERCOT that QSE IDENTITY has taken all necessary actions to comply with PRR 803, and in no way affects its independent obligation to comply with these requirements under the ERCOT Protocols.

Acknowledgment by **QSE:**

Signature of AR for QSE	
Printed Name of AR:	
Email Address of AR:	
Date:	
Name of Designated QSE:	
DUNS of Designated QSE:	