

ERCOT Impact Analysis Report

LPGRR Number	030	LPGRR Title	Distributed Renewable Generation Modifications
Impact Analysis Date	April 30, 2008		
Cost/Budgetary Impact	<p><u>Project cost:</u> Less than \$50,000. This project cost is already included in the cost estimate to implement Protocol Revision Request (PRR) 756, Distributed Renewable Generation Modifications.</p> <p><u>Ongoing expenses:</u> Any ongoing activities as a result of this Load Profiling Guide Revision Request (LPGRR) will be managed under the operations and management (O&M) budgets of the affected departments (See <i>ERCOT Business Functions Impact</i> section for more information).</p>		
Estimated Project Time Requirements* <small>*Unless otherwise indicated, project time requirements begin upon project initiation.</small>	<p>It is estimated that completing the Distributed Renewable Generation (DRG) Load Profiles will require approximately three months upon approval by the ERCOT Board of Directors. The market notice announcing DRG Profile Segments is expected to be sent in August 2008 (new Load Profiles require a market notice of at least 150 days prior to implementation). The new Load Profiles will be implemented on January 1, 2009, to comply with the settlement requirements of HB 3693, relating to energy demand, energy load, energy efficiency incentives, energy programs, and energy performance measures.</p>		
ERCOT Staffing Impacts (across all areas)	No additional staffing required as a result of implementing this LPGRR.		
ERCOT Computer System Impacts	<p>Metrix IDR software will be used to generate DRG Load Profiles.</p> <p>The Lodestar system will be modified for using DRG Load Profiles in settlement.</p>		
ERCOT Business Function Impacts	<p>ERCOT Staff will implement 128 new combinations of Load Profile Type with the existing eight Weather Zones to allow for Load Profiling methodology to represent the presence of DRG less than 50 kW. In the Load Profiling Guide, Appendix D will be modified while new Load Profile Model spreadsheets will be added to Appendix E.</p> <p>LPGRR030 will result in the following new business functions:</p> <ul style="list-style-type: none"> ERCOT Staff will review all assignments of the Load Profile Segments for photovoltaic, wind and other DRG on an annual basis, per Section 11.3.5, Validation of Profile Segments for Distributed Renewable Generation. ERCOT Staff will verify that only eligible Electric Service Identifiers (ESI IDs) are assigned Load Profile Segments for DRG. For ESI IDs found to have been assigned a Load Profile Segment for DRG erroneously, ERCOT Staff will work with the 		

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	<p>Transmission and/or Distribution Service Provider (TDSP) to have the Load Profile Segment assignment corrected.</p> <ul style="list-style-type: none">• ERCOT Staff will validate the DRG Load Profile models on an annual basis as specified in Section 8, Load Profile Models.• ERCOT Staff will validate the DRG Load Profile model outputs on a daily basis to confirm that the values used in Settlement are accurate.
Grid Operations & Practices Impacts	There are no impacts to grid operations and practices as a result of this LPGRR.

Implementation Alternatives <i>(include explanation of impacts)</i>
<p><u>Use ESI ID for Load and Resource Identifier (RID) for Resource:</u> This option would require Market Participants to submit Settlement data to ERCOT for DRG units using an ESI ID for Load and a RID for Generation. It would require DRG owners or their Retail Electric Providers (REPs) to register DRG units as a Resource with ERCOT. Market Participants may have to modify their systems to implement this solution. A cost-benefit analysis has not been completed for this option.</p> <p>Commercial Operations Subcommittee (COPS) discussed this alternative (and other variations) at length on 4/8/2008. COPS decided that the Load Profile solution it recommends is the optimal approach.</p>

Evaluation of Interim Solutions <i>(e.g., manual workarounds)</i>
None.

Feasibility of Implementation
<p>Impact on Resource Availability:</p> <p>Impact on Other Projects:</p> <p>As noted above, HB 3693 requires ERCOT to settle DRG less than 50 kW, by January 1, 2009. If such Settlement is done using new DRG Load Profiles, ERCOT procedures require a market notice of at least 150 days prior to implementation. Therefore, depending upon when PRR756 and LPGRR30 are approved, there may be an impact on ERCOT resources and other projects to comply with the requirements of HB 3693 and ERCOT Load Profile procedures.</p>

Comments
Currently there are fewer than 100 ESI IDs associated with DRG. The proposed Load Profile solution, although expensive for a few ESI IDs, is expected to be cost-effective in the long run when DRG is more widely used.