

Control Number: 24055



Item Number: 58

Addendum StartPage: 0

PROJECT NO. 24055

PROTOCOL REVISION	§	PUBLIC UTILITY COMMISSION
INFORMATIONAL FILINGS BY THE	§	PUBLIC UT THEY COMMISSION
ELECTRIC RELIABILITY	§	OF FEXAS ERK
COUNCIL OF TEXAS	§	

NOTICE OF ERCOT PROTOCOL REVISIONS AND IMPLEMENTATION (FEBRUARY 1, 2004)

COMES NOW the Electric Reliability Council of Texas, Inc. ("ERCOT") and respectfully informs the Public Utility Commission of Texas ("the Commission") of revisions to the ERCOT Protocols.

Summary of Revisions

In accordance with the process set forth in Section 21 of the ERCOT Protocols, ERCOT has adopted PRR 404 and 471 (effective upon system implementation); and PRR 461, PRR 467, PRR 469, and PRR 470 (effective February 1, 2004). Each of these Protocol revisions was developed in the ERCOT committee process and approved by the ERCOT Board of Directors (January 21, 2004). These Protocol revisions are described below.

PRR	Description	ERCOT Protocols Section Modified
404	Energy Procured from ERCOT. This PRR provides for the	Section 4, Subsection 4.3.2
	procurement of Balancing Energy through ERCOT processes	(Attachment A)
	and expands the functionality of Relaxed Balanced Schedules by	(Effective upon system
	allowing Market Participants to schedule generation via ERCOT	implementation)
	processes.	Section 16, Subsection
		16.2.7.4
		(Attachment B)
		(Effective upon system
		implementation)

PRR revision allows Market Participants participating in ERCOT work groups to review Protected Information for the purposes of developing analyses of system events. 467 Elaboration on the Notice of Resettlement. This PRR provides more clarity and structure to the notice of resettlement and clarifies the details to be provided on that notice. 469 Compliance for Competitive Metering. This PRR addresses the responsibilities of TDSPs, ERCOT, and Competitive Retailers related to Load research sampling, Time of Use schedules, and Direct Load Control. This PRR reflects reflects to corrections made to comply with Competitive Metering and PUCT Project No. 25516, Load Profiling and Load Research 18.7.2.2.2, 18.7.2.2.3, and the purposes of developing analyses of system events. (Attachment C) (Effective February 1, 2) (Attachment D) (Effective February 1, 2) (Effective Feb	2004)	
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	2.2.1,	
	ıd	
Rulemaking. 18.7.2.2.5		
(Attachment E)		
(Effective February 1, 2	004)	
470 System Fuel Availability. This PRR adds new wording to the Section 5, Subsections 5	.6.3,	
existing language in Section 5 to include fuel availability as a 5.6.4, and 5.6.6		
concern for an emergency condition. (Attachment F)		
(Effective February 1, 2	004)	
471 NIDR to IDR Default Profile Scaling. This PRR scales the Section 11, Subsection		
IDR default profile based on the Load of the last NIDR readings 11.3.3.3		
to reduce the variance in estimation of initial and final (Attachment G)		
settlement of the ESI ID. (Effective Upon System		
Implementation)]	

The changes to the Protocol language as revised by the above PRR/system implementation are shown in Attachments A through G in redline format.

The Protocols, all revisions thereto, and the details of the revision process, are available on the Internet at the link identified as "Protocols" on the ERCOT website, http://www.ercot.com/AboutERCOT/PublicDisclosure/ProtocolRev.htm.



Respectfully Submitted,

By:

Mark A. Walker

Senior Corporate Counsel Texas Bar No.: 20717318

Shari Heino

Corporate Counsel

Texas Bar No: 90001866

ERCOT

7620 Metro Center Drive

Austin, Texas 78744

Telephone No.: (512) 225-7076

Fax No.: (512) 225-7079 Email: <u>mwalker@ercot.com</u>

LIST OF ATTACHMENTS

ATTACHMENT A Section 04-020104 Redline

ATTACHMENT B Section 16-020104 Redline

ATTACHMENT C Section 01-020104 Redline

ATTACHMENT D Section 09-020104 Redline

ATTACHMENT E Section 18-020104 Redline

ATTACHMENT F Section 05-020104 Redline

ATTACHMENT G Section 11-020104 Redline

ERCOT Protocols Section 4: Scheduling

January February 1, 2004

4 SCHEDULING

4.3 Scheduling-Related Duties of Qualified Scheduling Entities

4.3.2 Schedule Components

Included in each Balanced Schedule is:

- (1) Energy to be produced by Resources that the QSE represents, by Congestion Zone;
- (2) Energy to be consumed by Loads that the QSE represents (including T&D Losses) by Congestion Zone;
- (3) ERCOT allocated Ancillary Services Obligations for the QSE;
- (4) Any energy and Ancillary Services scheduled to or from other QSEs or ERCOT (e.g. Inter-QSE Trades); and
- (5) Any Self-Arranged Ancillary Services.

When relaxed Balanced Schedules are allowed by ERCOT, pursuant to Section 4.3.5, Requirement for Balanced Schedules, the requirement for subpart (2) above shall be relaxed and QSEs shall be allowed to schedule energy for Load that is equivalent to the amount of scheduled energy for Resources as specified in subpart (1) above.

[PRR404: Replace Section 4.3.2 with the following upon system implementation:]

Included in each Balanced Schedule is:

- (1) Energy to be produced by Resources that the QSE represents, by Congestion Zone;
- (2) Energy to be consumed by Loads that the QSE represents (including T&D Losses) by Congestion Zone;
- (3) ERCOT allocated Ancillary Services Obligations for the QSE;
- (4) Any energy and Ancillary Services scheduled to or from other QSEs (e.g. Inter-QSE Trades);
- (5) Any Balancing Energy scheduled through the ERCOT scheduling process; and
- (6) Any Self-Arranged Ancillary Services.

When relaxed Balanced Schedules are allowed by ERCOT, pursuant to Section 4.3.5, Requirement for Balanced Schedules, the requirement for subpart (2) above shall be relaxed and

QSEs shall be allowed to schedule energy for Load that is equivalent to the amount of scheduled energy for Resources as specified in subpart (1) and (5) above.

Use of Balancing Energy scheduled via ERCOT to meet Obligations shall be limited to an amount supported by the QSE's credit collateral with ERCOT.

ERCOT Protocols Section 16: Registration and Qualification of Market Participants

November-February 1, 20032004

16 REGISTRATION AND QUALIFICATION OF MARKET PARTICIPANTS

16.2 Registration and Qualification of Qualified Scheduling Entities

16.2.7 Determinat ion of Total Estimated Liability

16.2.7.4 Determination of <u>Aggregate Net Balancing Energy Load Imbalance Liability and Net Resource Imbalance Liability (NLRI)</u>

This subsection applies to all QSEs. For any uninvoiced operating weeks invoice periods that have not been invoiced in which a the sum of:

- (1) the percentage by which a QSE's total estimated Load (MWh) differs from its scheduled Load (MWh); and
- (2) the percentage by which a QSE's total estimated Resource (MWh) differs from its scheduled Resource (MWh)

exceeds QSE's total estimated Load as calculated by ERCOT exceeds its scheduled Load by more than twenty percent (20%), ERCOT will monitor daily and calculate, at least weekly, an aggregate incremental nNet Load Imbalance LiabilityBalancing Energy and Net Resource Imbalance Liability (NLRI), based on the formula below. Any QSE that is required to post security is responsible, at all times, for maintaining posted security at or above the amount of their its EAL, plus the QSE's aggregate incremental net Balancing Energy liability, NLRI minus the QSE's Unsecured Credit Limit.

NBEL = [ELI x EBESP] - [LIQ enl x MCPQ enl] (for all uninvoiced weeks plus one forward week)

 $\underline{NLRI = [(ELI \times EBESP) + (ERI \times EBESP)] - [(LIQ_{eal} \times MCPQ_{eal}) + (RIQ_{eal} \times MCPQ_{eal})]}$

Where:

NBELRI =Net Load Imbalance Balancing Energy Liability and Net Resource Imbalance Liability

- ELI = Estimated Load ilmbalance, which is:
 - 1) Estimated Load <u>iImbalance</u> for operating weeks <u>invoice</u> periods that are completed but not <u>billedinvoiced</u>, calculated as the higher of ERCOT's estimate of the QSE's Load <u>iImbalance</u> for the period and the QSE's estimate of Load <u>iImbalance</u> for the period; and
 - 2) Estimated Load <u>iImbalance</u> for an <u>operating week invoice period</u> not yet completed, calculated as the higher of 1) ERCOT's estimate of the QSE's Load <u>iImbalance</u> for the most recent seven (7) day period, or 2) the QSE's forecast of Load <u>iImbalance</u> for the next seven (7) day period.

ERI = Estimated Resource Imbalance liability, which is:

- (1) Estimated Resource Imbalance (MWh) for invoice periods that are completed but not invoiced, calculated as the higher of ERCOT's estimate of the QSE's Load Imbalance for the period, which will include both scheduled and unscheduled use of the Balancing Energy Service, and the QSE's estimated Resource Imbalance for the period; and
- (2) Estimated Resource Imbalance for an invoice period not yet completed, calculated as the higher of 1) ERCOT's estimate of the QSE's Load Imbalance, which will include both scheduled and unscheduled use of the Balancing Energy Service, for the most recent seven (7) day period, or 2) the QSE's forecast of Load Imbalance for the next seven (7) day period.

EBESP = Estimated Balancing Energy Service Price, which is:

<u>1)(1)</u> Estimated Balancing Energy Service Price for each operating week invoice period completed but not billedinvoiced, calculated as the average, for the period, of the higher of 1) the daily weighted average price of Balancing Energy Up Service procured, or 2) the daily weighted average price of Balancing Energy Down Service procured as included in the daily market operations report.

The daily weighted average price of Balancing Energy Up Service procured and the daily weighted average price of Balancing Energy Down Service procured, as included in the daily market operations report, are calculated by dividing the total charges for all BES procured by the total amount of such BES, in MWh, delivered that day.

<u>2)(2)</u> Estimated Balancing Energy Service <u>pPrice</u> for an operating week invoice <u>period</u> not yet completed, calculated as one hundred fifty percent (150%) of the most recent average, for the period, of the higher of 1) the daily weighted average price of Balancing Energy Up Service procured or 2) the daily weighted average price of Balancing Energy Down Service procured, as included in the daily market operations report; except that the EBESP will not be less than thirty dollars (\$30) per MWh.

The daily weighted average price of Balancing Energy Up Service procured and the daily weighted average price of Balancing Energy Down Service procured, as included in the daily market operations report, are calculated by dividing the total charges for all BES procured by the total amount of such BES, in MWh, delivered that day.

a. ERCOT will review the price per MWh and multiplier at least quarterly to ensure that the EBESP as calculated in 1) above each day for the previous seven (7) day period captures no less than ninety-five percent (95%) of the price volatility for a one (1) year period. Changes to the EBESP calculation will be reviewed and approved by

the Finance and Audit Committee. ERCOT will provide notice to Market Participants of any change at least fourteen (14) days prior to the effective date along with the analysis supporting the change.

LIQ_{eal} = Load imbalance volume factored into a QSE's EAL calculation.

RIQ_{eal} = Resource Imbalance (MWh) factored into a QSE's EAL calculation.

MCPQ_{eal} Market Clearing Prices factored into a QSE's EAL calculation.

To the extent that ERCOT, using commercially reasonable measures, determines that the NBELRI so calculated does not adequately match the financial risk to the ERCOT mMarket Participants, ERCOT may specify a larger or smaller NBELLRI than would be produced by the use of the above formula. ERCOT will, to the extent practical, exchange with the QSE that information utilized in determining credit requirements. ERCOT will provide written notification to the QSE of the basis for ERCOT's assessment of the QSE's financial risk, and the applicable credit requirements.

ERCOT Protocols Section 1: Overview

October-February 1, 20034

1 OVERVIEW

1.3 Confidentiality

1.3.6 Exceptions

Receiving Party may, without violating this Section 1.3, Confidentiality, disclose <u>certain</u> Protected Information:

- (1) To governmental officials, Market Participants, the public, or others as required by any law, regulation, or order, or by these Protocols, provided that any Receiving Party must make reasonable efforts to restrict public access to the Disclosed Protected Information by protective order, by aggregating information, or otherwise if reasonably possible; or
- (2) If ERCOT is the Receiving Party and Disclosure to the PUCT of the Protected Information is required from ERCOT pursuant to applicable Protocol, law, regulation or order; or
- (3) If Disclosing Party that supplied the Protected Information to the Receiving Party has given its prior written consent to the Disclosure, which consent may be given or withheld in Disclosing Party's sole discretion; or
- (4) If the Protected Information, before it is furnished to Receiving Party, is in the public domain; or
- (5) If the Protected Information, after it is furnished to Receiving Party, enters the public domain other than as a result of a breach by Receiving Party of its obligations under this Section 1.3, Confidentiality; or
- (6) If reasonably deemed by the disclosing Receiving Party to be required to be disclosed in connection with a dispute between Receiving Party and Disclosing Party; provided that the disclosing Receiving Party must make reasonable efforts to restrict public access to the disclosed Protected Information by protective order, by aggregating information, or otherwise if reasonably possible; or
- (7) To a TDSP engaged in transmission or distribution system planning and operating activities, provided that the TDSP has executed a confidentiality agreement with requirements substantially similar to those in Section 1.3, Confidentiality; or
- (8) To a vendor or prospective vendor of goods and services to ERCOT so long as such vendor or prospective vendor: (i) is not a Market Participant and (ii) agrees to abide by the terms of Section 1.3, Confidentiality, regarding management of Protected Information; or
- (9) To NERC if required for compliance with any applicable NERC requirement; or
- (10) Reports of Outages and Ancillary Service deployments to the ERCOT Performance
 Disturbance Compliance Working Group and the Reliability and Operations
 Subcommittee of TAC, To ERCOT and its consultants, and members of task forces and working groups of ERCOT engaged in performing analysis of abnormal system

conditions, disturbances, unusual events, and abnormal system performance, provided that Ancillary Service Bid prices are or other competitively sensitive price or cost information shall not be disclosed, and further provided that the members of task forces and working groups execute a confidentiality agreement with requirements substantially similar to those in Section 1.3, Confidentiality. Data to be disclosed under this exception shall be limited to clearly defined periods surrounding the relevant conditions, events, or performance under review and will be limited in scope to information pertinent to the condition or events under review and may include the following:

- a. QSE base schedules;
- b. OSE AS awards and deployments, in aggregate and by type of Resource;
- c. Resource facility availability status, including the status of switching devices, auxiliary loads, and mechanical systems which had a material impact on Resource facility availability or an adverse impact on the transmission system operation;
- d. Individual Resource information including, real power output, reactive output, and maximum/minimum generating capability;
- e. Resource control mode and protective device settings and status;
- f. QSE SCE and its components, including governor response, bias, and droop setting:
- g. Load Imbalance;
- h. Data from Resource Plans; and,
- i. Resource Outage schedule information.

Such information shall not be disclosed to other Market Participants prior to ten (10) days following the date(s) under review.

ERCOT Protocols Section 9: Settlement and Billing

January February 1, 2004

9 SETTLEMENT AND BILLING

9.2 Settlement Statements

9.2.5 Resettlement Statement

9.2.5.1 Notice of Resettlement

While maintaining confidentiality premises of all Market Participants, ERCOT shall post a notice of resettlement on the MIS indicating that a specific Operating Day will be resettled and the date the Resettlement Statement will be issued by ERCOT. <u>ERCOT</u> shall include the following information in the Notice of Resettlement:

- a. Detailed description of reason(s) for resettlement;
- b. Affected Operating Days;
- c. Affected settlement charge types;
- d. Resettled billable quantity, if known;
- e. Resettled price, if known; and
- f. Total Resettled amount, by charge type.

ERCOT Protocols Section 18: Load Profiling

October February 1, 2003 2004

18	Load	Profiling	18-1
10	18.1	Overview	18-1
		Methodology	
		Posting	
	18.4	Assignment of Load Profile ID	
	18.5	Additional Responsibilities	
	18.6	Mandatory Installation and Use of Interval Data Recorders	
	18.7	Supplemental Load Profiling	

18 LOAD PROFILING

18.1 Overview

The ERCOT retail market requires a fifteen (15) minute settlement interval, yet the vast majority of Customers do not have the metering necessary to measure their consumption at this level of granularity. Load Profiling provides a cost-effective way of estimating fifteen (15) minute load for these Customers, enables the accounting of their energy usage in the market settlement process, and allows the participation of these Customers in the retail market.

This section details how Load Profiling will be implemented in ERCOT.

18.2 Methodology

ERCOT will develop Load Profiles for both non-interval metered loads and Non-Metered Loads. A Load Profiling Methodology is the fundamental basis on which Load Profiles are created. The implementation of a Load Profiling Methodology may require statistical Sampling, engineering methods, econometric modeling, or other approaches.

The following Load Profiling methods will be used for market open:

Type of Load	Load Profiling Methodology
Non-Interval Metered	Adjusted Static Models
Non-Metered	Engineering Estimates

Load Profiles will also be developed for Interval Data Recorders (IDRs) for use in settlements when actual IDR data is not available. All Load Profiles will conform to the ERCOT-defined Settlement Interval length.

Any change from one methodology to another will require approval of the ERCOT Board, without the necessity of complying with the procedures in Section 21, Process for Protocols Revision. The Board shall establish the implementation date for approved changes, as the Board deems appropriate, recognizing the magnitude of the impacts on Market Participants.

18.2.1 Guidelines for Devel opment of Load Profiles

In developing Load Profiles, ERCOT shall strive to achieve an optimal combination of the following:

- (1) Give no unfair advantage to any Entity;
- (2) Maximize usability by minimizing the total number of Load Profiles without compromising accuracy and cost effectiveness;

- (3) Minimize the Load Profiles' contribution to UFE over all Settlement Intervals, paying particular attention to higher cost periods;
- (4) Reflect reasonably homogenous groups, with respect to load shape and likely supply costs;
- (5) Develop Load Profiles that are distinctly different;
- (6) Develop Load Profiles for areas with incomplete load data utilizing data from other sources, taking into account similarities and differences in load;
- (7) Accommodate Time of Use (TOU) rate classes;

[PIP 106: Current system design does not allow for controlled loads or other similar pricing schemes. When the functionality is included in system design, item number (7) above will be replaced with the following:

- (7) Accommodate Time of Use (TOU) rate classes, controlled load classes, and other similar pricing schemes;
- (8) Use the most accurate load research data available; and
- (9) Develop Load Profiles based on readily identifiable parameters that are not subject to frequent change.

18.2.2 Load Profiles For Non -Interval Metered Loads

Load Profiles for non-interval metered loads will be created using statistical models developed from appropriate load research sample data. These models are referred to as "adjusted static." These model equations will relate daily Settlement Interval load patterns to relevant weather descriptors such as maximum and minimum dry-bulb temperature and humidity. Other daily characteristics such as day-of-the-week and sunrise/sunset times will also be employed.

18.2.3 Load Profiles for Non -Metered Loads

Load Profiles will be created for Non-Metered Loads, e.g. streetlights, traffic signals, security lighting, billboards, parking lots, etc. These Load Profiles will be created by using engineering estimates based on known criteria, such as hours of operation, with appropriate variation in sunrise/sunset times when suitable. TDSPs are responsible for providing monthly consumption (kWh) for non-metered ESI IDs.

18.2.4 Generic Load Profiles for IDRs

Generic or default Load Profiles will be developed for IDRs. These profiles will only be used when no historic Customer-specific interval data is available for settlements. The "adjusted static" methodology will be used to create these Load Profiles.

For details on the method to estimate IDR data for settlement purposes, refer to Section 11, Data Acquisition and Aggregation.

18.2.5 Collection of Existing Load Research DataReserved

For market opening, ERCOT will collect readily available load research data from ERCOT TDSPs and evaluate it as to the collection method, age, and completeness of the samples. These data will be the basis for developing the appropriate statistical Load Profiling models for all areas in ERCOT.

18.2.6 Identification of Weather Zones and Load Profile Types

ERCOT, in coordination with the appropriate ERCOT TAC subcommittee, will identify Weather Zones and Load Profile Types based on an analysis of the load research data, weather data, effects of power price changes from interval to interval, and sunrise/sunset data.

18.2.7 Daily Profile Creation Process

ERCOT will maintain Load Profile models to create profiles for the target settlement day (backcast) and three (3) days following the current day (forecast). ERCOT will automatically collect actual weather conditions and weather forecasts to enable the creation of the Load Profiles. ERCOT will maintain sunrise/sunset information for creating Load Profiles that require these parameters.

18.2.8 Maintenance of Sa mples and Load Profile Models

ERCOT, in coordination with TDSPs, shall periodically monitor, review, and maintain the validity and accuracy of the load research samples and the Load Profiling models. ERCOT shall take the necessary action to alleviate any situations whereby Load Profiles are no longer representative.

18.2.8.1 Samples

ERCOT will review load research sample validity (e.g. difference-of-means test) at the following times: 1) upon TDSPs' submission of load research data, 2) every year, and $\underline{23}$) when discrepancies (such as excessive UFE) or disputes warrant.

When ERCOT implements its own load research Sampling, ERCOT will monitor and review this Sampling in accordance with ERCOT Protocols and the most current Association of Edison Illuminating Companies (AEIC) Load Research manual.

ERCOT may request the TDSPs to submit available class load research data and supporting sample IDR data to ERCOT as frequently as every six (6) months, or at other times as situations warrant.

18.2.8.2 Models

ERCOT shall monitor the applicability of the Load Profiling models by comparing all available actual IDR data samples with estimates generated from the profile model by interval for the same time period. Should these comparisons reveal significant discrepancies, ERCOT should take appropriate action and coordinate with the appropriate ERCOT TAC subcommittee (UFE analysis function), if necessary.

18.2.9 Adjust ments and Changes to Load Profile Development

ERCOT and the appropriate ERCOT TAC subcommittee will conduct an ongoing evaluation of the current Load Profiling Methodology. Together they will determine whether appropriate changes to the methodology should be made or whether another approach or combination of approaches is warranted. Any Market Participant may request a review of the Load Profiling Methodology. A change from one Load Profiling Methodology to another must be approved by the ERCOT Board, as provided in Section 18.2, Methodology.

Any Market Participant may petition ERCOT for adjustments to the existing Load Profiles and for development of new Load Profiles. The Market Participant making the request shall submit their proposal in writing to ERCOT. ERCOT will post to the Market Information System (MIS) the request and respond to such requests within sixty (60) days. ERCOT shall coordinate with the appropriate ERCOT TAC subcommittee for each change request. ERCOT shall strive to make the necessary changes within a reasonable period of time.

ERCOT, in coordination with the appropriate ERCOT TAC subcommittee, may make changes to existing Load Profiles and establish additional Load Profiles. All changes to Load Profiles shall adhere to these Protocols. When additional Load Profiles are established, ERCOT shall evaluate the impact on existing Load Profiles and associated load research samples.

A Market Participant may submit a request to ERCOT for conditional approval of a new Load Profile segment following the approval process as specified in the Load Profiling Guides, Section 12, Request for Profile Segment Changes, Additions, or Removals. In conjunction with this request, ERCOT staff shall specify the requirements for additional Load research sampling and shall define specific and objective criteria to be met by the analysis of this Load research data to meet the requirements for final approval. Provided the request for conditional approval has received the appropriate ERCOT committee approval and ERCOT staff determines the specified criteria are met, the request shall be granted final approval. If ERCOT staff determines the specified criteria are not met, the request shall be denied.

Section 9.9, Profile Development Cost Recovery Fee for a Non-ERCOT Sponsored Load Profile Segment, describes the process for compensating the originator of a profile segment change request by REPs wishing to subscribe to the profile segment.

ERCOT shall give at least one hundred fifty (150) days notice to all Market Participants prior to market implementation of any change in Load Profile Methodology, existing Load Profiles, or when any additional Load Profiles are developed. This notice shall include a Load Profile

change implementation timeline, which specifies dates on which key events during the Load Profile change process will take place. Upon any change in Load Profile Types, TDSPs shall send any revised ESI Load Profile assignments required by the change to the registration system within the implementation timeline. After the new Load Profile(s) becomes available, changes to Load Profile Types will be effective on the next meter read date for each ESI ID.

If one or more Load Profiles require changes to reduce excessive UFE, as determined by the appropriate ERCOT TAC subcommittee, TAC may provide a shorter notice period and implementation date, than otherwise provided herein, for such required changes to Load Profiles. If the Load Profile Methodology requires changes to reduce excessive UFE, as determined by the appropriate ERCOT TAC subcommittee, the Board may provide an expedited notice period and implementation date. TAC may require the standard Load Profile revision process follow such expedited revisions for long-term resolution.

18.2.10 Special Requirement for Profiling Sample Points

When a Premise has an Interval Data Recorder (IDR) installed as part of a load research sample used for Load Profiling, and that Premise or that Premise's Competitive Retailer elects to use its interval data for settlement purposes, it will be necessary to replace that Premise in the sample. It will be incumbent on ERCOT to coordinate this type of change with the TDSP, if appropriate.

A Premise cannot be sampled for both a Load Profiling program and a special application program.

18.2.11 Responsibilities for Sampling in Support of Load Profiling

18.2.11.1 ERCOT Sampling Responsibilities

ERCOT is ultimately-responsible for the development and maintenance of Load Profiles used in the ERCOT market. During initial development of Load Profiles prior to market open, ERCOT will request existing load research data from ERCOT TDSPs. These data will be collected, analyzed, and used in Load Profile model development. After market open, ERCOT may request more current load research data (in an ERCOT specified format) to aid in the development or refinement of Load Profile models, subject to section 18.2.9, Adjustments and Changes to Load Profile Development. If ERCOT determines that more load research data is needed than currently exists, it is the responsibility of ERCOT to accomplish all necessary Sampling functions, i.e., Sample Design, sample selection, IDR installation, IDR data collection and processing, population estimation, sample maintenance, and sample validation. ERCOT shall be responsible for the costs associated with the Sampling functions it directs. ERCOT shall follow the Load Profiling and Load Research rules and procedures as specified in the PUCT rules.

18.2.11.2 TDSP Sampling Responsibilities

The TDSP's' <u>loadLoad</u> research data is <u>are</u> critical for Load Profile development by ERCOT from market open through implementation of an ERCOT <u>loadLoad</u> research program. TDSPs, other than Non-Opt In Entities, shall provide available <u>loadLoad</u> research data when requested by ERCOT.

The TDSPs, other than Non-Opt In Entities, shall provide ERCOT at least one (1) year notice of any significant change in the status of the TDSPs <u>load</u> research programs.

TDSPs shall address the appropriate ERCOT TAC subcommittee as a forum for their input in the development and refinement of Load Profiles.

TDSPs shall follow the rules and procedures as specified in PUCT rules.

TDSPs shall maintain existing load research samples to the accuracy designed including the selection of alternate sample sites to maintain sample validity.

The TDSPs will not be obligated to provide any functions for ERCOT-defined samples, except for IDR installation and IDR data collection and processing until metering becomes competitive.

ERCOT may request from TDSPs, and such TDSPs shall provide, the most current Load research data reasonably available to aid in the development or refinement of Load Profile models, subject to Section 18.2.9, Adjustments and Changes to Load Profile Development.

18.3 Posting

ERCOT will make available to Market Participants the following information in a timely manner, subject to confidentiality agreements, proprietary arrangements, and PUCT rules and regulations.

18.3.1 Methodology Information

A complete description of all supporting models, documentation and data used in preparation of Load Profiles will be made available on the Market Information System, including:

- (1) The historic load data used to create the Load Profiles;
- (2) Average interval accuracy of each Load Profiling model;
- (3) Weather information;
- (4) Sunrise/sunset information;
- (5) Updates of TDSP load research data as it becomes available to ERCOT; and

(6) Any other data used for Load Profile development.

18.3.2 Load Profiling Models

ERCOT will make available the models used to produce the forecast and backcast profiles for the settlement process. The Load Profile models shall be accessible via the Market Information System in a downloadable format.

18.3.3 Load Profiles

ERCOT will publish Load Profile data from the daily-profile creation process, in accordance with Section 18.2.7, Daily Profile Creation Process to the Market Information System and through the common API. Load Profile data will be made available to Market Participants for a period of two (2) years.

ERCOT will post to the Market Information System by 1000 each Business Day and forecasted Load Profiles for the three (3) following days for each Load Profile Type and Weather Zone. Backcast profiles for each Load Profile Type and Weather Zone will be available by 1000 of the second (2nd) business Business Delay following the backcast day. No data will be provided that will allow identification of individual Customers.

18.4 Assignment of Load Profile ID

Each ESI ID is required to be associated with an appropriate Load Profile ID. This section details the process of assigning a Load Profile ID to each ESI ID.

18.4.1 Developmen t of Load Profile ID Assignment Table

ERCOT shall develop a cross-reference table of all Load Profile ID used in the ERCOT market. The table shall clearly state class relationship to Load Profile Type. This information shall be made accessible, on the MIS, to all Market Participants. The cross-reference information shall be compiled and expressed in clear, unambiguous language, and in a manner that will minimize Load Profile ID assignment disputes.

18,4,2 Reserved Load Profile ID Assignments at Market Open

At market open, TDSPs shall be responsible for assigning the initial Load Profile ID of all ESI IDs. All Load Profile ID assignments shall be based on the published cross reference information. Competitive Retailers may review and dispute any TDSP assigned Load Profile ID using the ERCOT dispute resolution process, as described in Section 9.5, Settlement and Billing Dispute Process.

18.4.3 Load Profile ID Assign ment-after Market Open

ERCOT and the appropriate ERCOT TAC subcommittee shall review the Load Profile ID assignment process on an annual basis. They shall make recommendations for enhancements, and They shall also evaluate the integration of the validation and assignment processes.

Should there be any change in Load Profile ID assignment to any ESI ID, it will be the responsibility of the TDSP to submit those changes to ERCOT.

18.4.4 V alidation of Load Profile Type and Weather Zone Assignments

In this section validation shall mean performing checks to ensure correct assignment of ESI IDs to Load Profile Types and Weather Zones.

18.4.4.1 Validation Tests

This section refers to validation of the assignment of Load Profile Type and Weather Zone to ESI IDs.

Validation tests of Load Profile Type and Weather Zone assignments, at a minimum, will occur at the following times: initial Load Profile ID assignment, when a change is made in the Load Profile Type or Weather Zone assignment, and at least one time per year.

ERCOT may utilize a sampling method for Load Profile Type assignment validation and when a change is made in the Load Profile ID assignment.

ERCOT shall validate the assignment of the Weather Zone component of the Load Profile ID for all ESI IDs.

ERCOT shall perform validation tests of the initial Load Profile Type and Weather Zone assignments of each TDSP. Samples of assignments from the Residential and Business Profile Groups will be randomly drawn from each TDSP's population of profiled ESI IDs. If the assignment validation failure rate for any of these samples exceeds parameters specified in the Load Profiling Guides, ERCOT may request an audit of the corresponding TDSP's Load Profile ID assignment processes and systems at the expense of the TDSP. ERCOT may require TDSPs that fail sample Load Profile Type or Weather Zone assignment validations and/or audits to resubmit Load Profile ID assignments for all ESI IDs in their service territory.

Details of all validation tests will be specified in the Load Profiling Guides. The validation test reports generated as exceptions are identified and shall be posted to the Market Information System. Competitive Retailers may dispute a Load Profile ID assignment through the ERCOT settlement dispute process, as described in Section 9.5, Settlement and Billing Process, in conjunction with the Load Profiling Guides.

TDSPs shall change the assignment of a Load Profile ID for the single ESI ID based on an outcome of a dispute finding in favor of a Competitive Retailer. If required to change an assignment, TDSPs must correct the assignment in their system and the ERCOT Customer registration system within three (3) Business Days.

18.4.4.2 Correction Procedure

TDSPs are responsible for investigating each ESI ID identified by ERCOT as having a potentially incorrect Load Profile ID assignment. Each TDSP shall work closely and promptly with ERCOT during the correction procedure, which is detailed in the Load Profiling Guides.

Market Participants may dispute an assignment through the ERCOT settlement dispute process, described in Section 9.5, Settlement and Billing Dispute Process, of these Protocols.

18.4.5 A ssignment of Weather Zones to ESI IDs

TDSPs will assign each ESI ID to a Weather Zone, based on service address zip code.

ERCOT will post to MIS a mapping of a Weather Zone to appropriate Customer registration element used in assigning Weather Zones.

18.5 Additional Responsibilities

This section addresses any responsibilities not specified in other for Load Profiling not specified in other Sections of the Protocols sections or Sections of these Protocols.

18.5.1 ERCOT Responsibi lities

As the market matures, ERCOT's responsibilities will expand to include the design and implementation of an ERCOT wide load research program in order to develop Load Profiles. ERCOT will meet with the appropriate ERCOT TAC subcommittee as a mechanism to allow potential Market Participants to have input to ERCOT. ERCOT will develop, administer, and maintain Load Profiles in accordance with these Protocols. Disputes related to the accuracy or appropriateness of Load Profiles shall be handled in accordance with Section 9.5, Settlement and Billing Dispute Process. ERCOT shall adhere to the profiling guidelines as set forth in the Guides.

18.5.2 TDSP Responsibilit ies

TDSPs shall use the appropriate ERCOT TAC subcommittee as a forum for their input in the development and refinement of Load Profiles.

18.5.3 Co mpetitive Retailer Responsibilities

Competitive Retailers shall use the appropriate ERCOT TAC subcommittee as a forum for their input in the development and refinement of Load Profiles.

Competitive Retailers shall be responsible for reviewing any assignment of Load Profiles to ESI IDs they represent.

18.6 Mandatory Installation and Use of Interval Data Recorders

18.6.1 Interval Data Recorder (IDR) Installation and Use in Settlement

- (1) IDR Requirement: IDRs shall be installed and utilized for settlement of Premises having either:
 - a. A peak demand greater than 1000 kW (or 1000 kVa), or
 - b. Service provided at transmission voltage (above 60 kV).
- A Competitive Retailer may have an IDR installed and used for settlement purposes at any associated Premise outside the IDR Requirement. Except as stated in item (4) of this Section, IDRs in place or installed after September 1, 1999 shall be used for settlement. Once an IDR is installed on a Premise and used for settlement purposes, the given premise shall continue to be settled with its interval data.
- (3) All Non-Metered Loads such as street lighting, regardless of the aggregation level, shall not be required to install IDRs under the IDR Requirement. These loads shall be settled using Load Profiles.
- (4) For premises not subject to the IDR Requirement in item (1) of this Section, IDRs installed at the request of ERCOT, a TDSP, a municipal, or a cooperative for load research, rate/tariff design calculation, coincident demand calculation, or Load Profiling purposes shall be exempt from the requirement to use an IDR for settlement purposes.
- (5) For IDR installation procedures reference Section 10.2.2, TDSP Metered Entities.
- (6) TDSPs responsible for any Load transfer schemes between ERCOT and Non-ERCOT regions shall install IDR metering capable of measuring the load served during the period the Load transfer is implemented.

18.6.2 IDR Ad ministration Issues

ERCOT shall produce a report informing the appropriate Market Participants of profiled Premises that have become subject to the IDR Requirement. ERCOT shall put in place a system to track Market Participants' timely adherence to this requirement. This report shall be posted to MIS.

18.6.3 Adherence to Interval Data Recorder Requireme nts

In preparation for market open, TDSPs shall install IDRs at all Premises subject to the IDR Requirement and complete all necessary settlement system testing and integration requirements by the commencement of the Customer Choice Pilot.

Municipal Entities and <u>Electric Ceooperative Entities</u> that opt-in to Customer Choice will be required to meet the <u>IDR Requirement must install IDR meters at all Premises subject to the IDR Requirement for metering prior to the effective date of their participation on a schedule that supports in the testing and integration requirements of ERCOT <u>Sssystems for Customer Choice</u>.</u>

18.6.4 Technical Requiremen ts

Regardless of data retrieval method, interval data shall be provided on a schedule that supports the requirements of final settlement (typical monthly billing cycle).

Interval data that is provided for settlement shall be consistent with the ERCOT defined Settlement Interval.

IDRs used for settlement shall meet technical metering requirements defined in the Load Profiling Guides.

18.6.5 Future Requi rements for IDRs

ERCOT and the appropriate ERCOT TAC subcommittee shall evaluate the impact of the IDR Requirement as defined in this Section for possible revision prior to the introduction of competitive metering services to the market on January 1, 2004.

18.6.6 Peak Demand Determi nation for Non-IDR Premises

For the purpose of determining the peak demand level for the IDR Requirement in Section 18.6.1, Interval Data Recorder (IDR) Installation and Use in Settlement, the demand will be determined in accordance with PUCT rulemaking or through a consensus process with ERCOT and Market Participants. In the absence of a clear definition of peak demand in the "price to beat" rulemaking, the following application shall be used in determining the peak demand level for IDR Requirement in Section 18.6.1, Interval Data Recorder (IDR) Installation and Use in Settlement:

A Premise (ESI ID) has a peak demand greater than 1000 kW when a demand greater than 1000 kW has been measured in any two (2) billing months of the most recent twelve (12) month period. Competitive Retailers may dispute an IDR assignment through the ERCOT settlement dispute process, described in Section 9.5 Settlement and Billing Dispute Process.

ERCOT shall be responsible for receiving and storing demand information necessary for determining mandatory IDR installations.

18.7 Supplemental Load Profiling

ERCOT and the appropriate ERCOT TAC subcommittee recognize the possible need to accommodate Load Profiling for programs or pricing schemes that encourage a demand response to price in the retail market. Accordingly, Load Profiling methods other than adjusted static methodology are necessary.

18.7.1 Load Profiling of Ti me-of-Use Metered ESI ID

18.7.1.1 Overview

The ERCOT data aggregation and settlement systems must be able to collect and handle time-of-use (TOU) meter data. The profiling of premises participating in TOU programs requires TOU meter reads so that consumption can be distributed within the appropriate time periods.

A <u>T</u>time <u>-oOf</u> <u>-uUse</u> (TOU) meter is a programmable electronic device capable of measuring and recording electric energy in pre-specified time periods. For Load Profiling purposes this definition does not include IDRs. <u>For additional information regarding Specification for TOU, meters can be found in reference the Load Profiling Guides.</u>

The ERCOT Data Aggregation and Settlement systems must be able to collect and handle TOU meter data. The profiling of premises participating in TOU programs requires TOU meter reads so that consumption can be distributed within the appropriate time periods.

18.7.1.2 Methodology Fo r Load Profiling of Time-Of-Use (TOU)

The selected technique for generating profiles for TOU Premises is described as follows:

- (1) Each TOU Premise is assigned to a standard Load Profile <u>Type(e.g.</u> residential, commercial).
- (2) Upon agreement between the CR and TDSP, a Time-of-Use Schedule (TOUS) is submitted by the TDSP to the ERCOT Data Aggregation System (DAS), which identifies the TOU period associated with each

Settlement Interval. The number of TOU periods is determined by the number of periods for which the meter will capture kWh. These periods may include on-peak, off-peak, and shoulder periods. The DAS shall collect and maintain the attributes of the TOUS (e.g. start and stop time, day of the week, season, etc.).

- (3) Competitive Retailers shall communicate to TDSPs their ESI IDs associated with the proper TOUS.
- (4) The TDSP shall communicate all TOUSs to DAS so that proper TOUS identification for each Premise will occur in the ERCOT central database.
- (5) The ERCOT DAS shall use the standard Load Profile assigned to each TOU Premise and scale the energy for each TOU period in the Load Profile so that it is equal to the metered energy (kWh) for the TOU period.
- (6) TOU Load Profiling will not use TOU demand values.

18.7.1.3 Collection of Time -Of-Use Meter Data

TDSPs will be responsible for providing the meter reads necessary to support TOUS available in their service territory. The ERCOT DAS shall collect and handle multiple TOU reads for each Settlement Interval. These Settlement Intervals may include onpeak, off-peak, and shoulder periods.

18.7.1.4 Availability of TOU Schedules

At market open, The availability of TOU schedules will be dependent on the following:

- (1) For TDSP service territories with TOU tariffs in effect prior to December 31, 2000, all Competitive Retailers will be able to offer the TOU schedules associated with those tariffs.
- (2) Within every investor-owned TDSP service territory, additional TOUS (tTime oOf uUse) sSchedules shall be implemented if approved by the PUCT. The implementation of any new or modified TOUS schedules would be subject to the ERCOT and Texas SET change control process.
- (3) The above rules shall be effective until metering becomes competitive.

18.7.1.5 Post Market Evaluation

Starting at the first completed settlement cycle, ERCOT and the appropriate ERCOT TAC subcommittee shall periodically review the selected profiling technique of TOU ESI IDs for accuracy, and validity. They may recommend enhancements, modifications, or a complete replacement of the technique.

18.7.2 Load Profiling of ESI I Ds Under Direct Load Control

This section is reserved for future implementation of Direct Load Control

[PIP 106<u>, PRR385, and PRR469</u>: Current design does not provide for DLC settlement functions. When DLC Profiles are implemented, insert all of section 18.7.2 in this reserved section.]

18.7.2.1 Overview

Direct Load Control (DLC) programs require the installation of control devices on selected end-use equipment for the purposes of reducing energy consumption during Competitive Retailer selected time intervals. It is recognized that these programs may result in altered load shapes that could no longer be represented by the Load Profile models that will be used for non-controlled loads.

The Load Profiling Guides (LPG) shall be referenced for details regarding the implementation of DLC in the ERCOT market.

18.7.2.2 Market Open Methodology

For market open, the technique for profiling Premises participating in DLC programs will be the use of a representative IDR (RIDR) profile. This approach consists of implementing a statistically representative load research sample on the DLC population. The sample data is then used to develop the representative IDR (RIDR) for profiling these Premises.

18.7.2.2.1 Sample Design for the Representative IDR Profile

All samples, intended for use in developing DLC RIDR profiles, shall comply with the following rules:

Samples should be selected from the active DLC program population, in a statistically random fashion.

The final installed sample size Sample Size shall be augmented from the original sample size sample Size to include a ten percent (10%) over-sampling margin.

The original sample size Sample Size shall be determined to achieve and maintain a minimum ninety percent (90%) confidence level, and a minimum plus or minus ten percent (±10%) accuracy, through each of the twelve (12) calendar months, and regardless of the selected sampling variable (e.g., monthly kWh, monthly peak kW).

The Sample Design shall be fully documented and made available to ERCOT, the appropriate ERCOT TAC subcommittee, and the PUCT, when requested.

The Sample Design, selection and maintenance shall adhere to the most recently published AEIC Load Research Manual.

The data processing, validation, editing, and estimation shall be performed according to Section 10.11, Validation, Editing and Estimationg of Meter Data, of these Protocols.

All installed sample IDR-s shall meet or exceed the ERCOT minimum specifications for IDR metering.

The sample statistical validity shall be verified every calendar year, and deficiencies shall be corrected as soon as practicable.

The anonymity of the DLC sample sites shall be maintained by all parties.

18.7.2.2.2 Roles and Responsibilities of Market Participants

The proper implementation of the RIDR methodology requires ERCOT, Competitive Retailers, TDSP's and their respective third party agents to adhere to the responsibilities in Section 18.7.2.2, Market Open Methodology.

Furthermore, ERCOT, TDSPs and their third party agents are the only Entities that shall know the location or identity of the RIDR sample sites.

18.7.2.2.3 ERCOT DLC Responsibilities

ERCOT is responsible for evaluating and approving all requests for <u>P</u>profile development of DLC programs. The request shall include information necessary to validate the Sample Design and verify the installation of both DLC devices and communication equipment.

ERCOT shall maintain the database used to identify the population of ESI IDs participating in all DLC programs. Furthermore, ERCOT shall facilitate the registration of DLC programs in the Data Aggregation System.

ERCOT or its designated third party agent is responsible for all Sample Design, implementation, monitoring, and validation of DLC program load research samples. ERCOT shall adhere to AEIC load research practices in maintaining the statistical validity of the sample.

Once metering becomes competitive, ERCOT may contract with a third party agent, selected in cooperation with the CR, to install the required number of sample IDRs, when installation of IDR metering service becomes competitive. The anonymity of the DLC sample sites shall be maintained.

Once metering becomes competitive, ERCOT may contract with a third party agent, selected in cooperation with the CR, to collect and validate the sample data, in accordance to AEIC load research practices, and in accordance with Section 10.11,

Validation, Editing and Estimation of Meter Data, when collection and validation of IDR data metering service becomes competitive.

ERCOT shall arrange to redeploy to an alternate location, within the DLC population, any sample IDR installed on a Premise that is no longer served by the initial Competitive Retailer, or on a Premise that no longer participates in the Competitive Retailer's DLC program. ERCOT shall ensure that the redeployment of such sample points occurs within two (2) meter read cycles of the Customer switch date.

When ERCOT has contracted with a third party agent to collect and provide sample IDR datae, that agent shall validate, edit, and estimate the sample meter datae in accordance with Section 10.11, Validation Editing and Estimation of Meter Data, and transfer such data to ERCOT in an ERCOT-specified format and schedule.

The ERCOT profiling sub-system shall use the proper RIDR when profiling Premises participating in a DLC program, during the settlement process. When actual RIDR data is not available for settlements, the DLC Program Settlement methodology as described in the Load Profiling Guides (LPG), shall be employed.

If the sample IDR data does not meet the data quality and availability standards, as detailed in the LPG, ERCOT shall provide a Settlement exception report, for Ffinal and subsequent Settlements, to the respective CR hosting the DLC program.

ERCOT may request, at any time, the raw sample interval data from the provider of this data for any DLC program offered.

ERCOT or its designated third party agent shall verify on a routine basis that the RIDR sample reflects the actual success/failure rate of the control devices in the DLC program population.

ERCOT or its designated third party agent shall verify on a routine basis that the RIDR sample reflects the actual success/failure rate of the communication equipment in the DLC program population.

ERCOT shall review existing DLC samples for compliance with the rules detailed in this Section. ERCOT may require adjustments to existing samples to meet these Protocols.

18.7.2.2.4 Competitive Retailer DLC Responsibilities

Competitive Retailers shall register their DLC programs according to the criteria specified in the LPG.

Competitive Retailers shall define their DLC programs, specify the controlled loads and describe the program's communication and control technologies.

Competitive Retailers shall pay for the installation, maintenance, and processing related to the load research sample installed to support their DLC programs.

Competitive Retailers shall pay all costs associated with demonstrating the RIDR sample is a statistically valid representation of the DLC program population in terms of success/failure rate of the control devices and communication equipment.

Competitive Retailers may contract with a third party to administer the DLC program.

Competitive Retailers and their third party program administrator shall not attempt to discover the location or identity of sampled Premises used to develop the RIDR for their DLC programs. A Competitive Retailer shall immediately notify ERCOT if it ascertains the location of any RIDR sample points. Any violation of this provision will result in a review by ERCOT of the RIDR used for DLC programs, which could result in the suspension of the DLC profile for use in settlements. ERCOT may resettle the market for affected Settlement Intervals.

18.7.2.2.5 TDSP DLC Responsibilities

Until such time as metering services become competitive, certain metering responsibilities associated with the DLC load research programs are the responsibility of the TDSP:

Each TDSP, or its designated third party agent, shall install the required number of sample IDRs as determined by ERCOT, and shall maintain anonymity of the DLC sample sites.

Each TDSP, or its designated third party agent, is responsible for collecting, validating, editing, and estimating the sample meter data, in accordance to AEIC <u>load Load</u> research practices, and in accordance with Section 10.11, Validation, Editing and Estimationg of Meter Data.

Each TDSP, or its designated third party agent, shall provide validated, edited and estimated interval data to ERCOT for each sample IDR within its territory, and transfer such data to ERCOT in an ERCOT-specified format and schedule.

Each TDSP, upon ERCOT request, must provide to ERCOT the raw sample interval data for any DLC program offered within its territory.

18.7.2.3 Post Market Evaluation

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Starting at the first completed settlement cycle, ERCOT and the appropriate ERCOT TAC subcommittee shall review the RIDR methodology for accuracy and validity on a regular basis. They may recommend enhancements, modifications, or a complete replacement of the methodology. In particular, ERCOT and the appropriate ERCOT TAC subcommittee shall review the profiling process of DLC programs, including their impact on non-DLC standard profiles, and make recommendations in view of competitive metering.

18.7.3 Other Load Profiling

ERCOT, in coordination with the appropriate ERCOT TAC subcommittee, may develop Load Profiles for particular Customer segments that may require special Load Profiling techniques similar in nature to TOU and DLC programs. Details are specified in the Load Profiling Guides.

ERCOT Protocols Section 5: Dispatch

September-February 1, 20043

5 DISPATCH

5.6 Emergency and Short Supply Operation

5.6.6 Emergency Notice

ERCOT will issue an Emergency Notice only for the following reasons:

- (1) ERCOT cannot maintain minimum reliability standards during the Operating Period using every Resource practically obtainable from the market;
- (2) ERCOT is in an unreliable condition, as defined below;
- (3) Immediate action must be taken to avoid or relieve an overloaded transmission element, or:
- (4) ERCOT varies from timing requirements or omits one or more scheduling procedures, as described in Section 4.8, Temporary Deviations from Scheduling Procedures.; or
- (5) ERCOT determines that a fuel shortage exists, based on information provided by the Market Participants.

The actions ERCOT takes during an Emergency Condition will depend on the nature and severity of the situation.

ERCOT is considered to be in an unreliable condition whenever ERCOT Transmission Grid status is such that the most severe single-contingency event presents the threat of uncontrolled separation or cascading outages and/or large-scale service disruption to Load (other than Load being served from radial transmission service) and/or overload of a critical transmission element, and no timely solution is obtainable from the market.

If the Emergency Condition is the result of a transmission problem that puts ERCOT in an unreliable condition, then ERCOT will act immediately to return ERCOT to a reliable condition, including instructing Resources to change output and instructing TDSPs to drop Load.

If the Emergency Condition is the result of a short supply situation, then the Emergency Electric Curtailment Plan procedures will be followed.

ERCOT Protocols Section 11: Data Acquisition and Aggregation

December February 1, 2003 2004

11 DATA ACQUISITION AND AGGREGATION

11.3 Load Data Aggregation

11.3.3 Interval Consu mption Data Estimation

11.3.3.3 Non-Weather Sensitive (NWSIDR) Proxy Day Method

For ESI IDs designated as NWSIDR, ERCOT will use a method for proxy day determination. This method incorporates the following:-

- (1) Use the most recent proxy day for which data is available as the estimate for the target Operating Day. From historical ESI ID specific interval data, choose the most recent occurrence of the appropriate day of the week (Su, M, T, W, Th, F, Sa) corresponding to the day of the week of the Operating Day (Holidays are treated as Sundays) within the most recent twelve (12) months of the Operating Day; or;
- (2) If there is no historic interval data available according to (1) above, the IDR data will be estimated using the default profile assigned to the ESI ID for the Operating Day.

[PRR471: Replace Section 11.3.3.3 item (2) above with the following upon system implementation:]

(2) If there is no historic interval data available according to (1) above, the IDR data will be estimated using the default profile assigned to the ESI ID for the Operating Day. If non-interval consumption data with a meter read within six (6) months of the trade day is available, and if the ESI ID was profiled with a non-interval meter data type code within ninety (90) days of the trade day, the default profile shall be estimated and/or scaled in accordance with Section 11.3.2, Non-Interval Missing Consumption Data Estimation.