Electric Reliability Council of Texas

Market Data Transparency
Service Level Agreement

Summary:

This document describes Market Data Transparency (MDT) services provided by ERCOT to Market Participants.

EFFECTIVE: 02/07/2018
## Document Revisions

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<th>Date</th>
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<th>Author(s)</th>
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<td>10.1</td>
<td>Updated Section 2.1.2 – 2018 Release Calendar</td>
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1. Introduction

This Service Level Agreement (SLA) describes Market Data Transparency (MDT) Services provided by ERCOT to Market Participants, and includes systems which support access to information, services and the delivery of data.

ERCOT provides market data in the form of reports, extracts, dashboards and web services. These products are summarized in the ERCOT Market Information List (EMIL). Issues associated with specific data products are circulated via Market Notice and discussed at the appropriate Working Group(s). Individual data products are out of scope for this document. Where applicable, this information builds upon the requirements outlined in ERCOT Protocols and related Market Guides regarding the delivery of data extracts and reports.

In the event of a conflict between this document and the ERCOT Protocols, ERCOT Market Guides or PUCT Substantive Rules, the Protocols or PUCT Substantive Rules take precedence over this document.

2. Services

The service associated with this agreement:

- **IT Applications** - the availability of the applications that enable user access to ERCOT data.

2.1 IT Applications

2.1.1 Service scope

IT Applications enable user access to ERCOT systems and contribute to the delivery of ERCOT data. Measured operational elements include hours of operation, availability and performance targets, and Planned Outage windows. The following IT applications are in scope:

- **Market Information System (MIS)**: User interface single point of access to protocol specified postings classified as Public, Secure, and Certified for reports, extracts, applications, and any other content required by protocol or a binding document.

- **External Web Services (EWS)**: Programmatic point-of-entry to market systems enabling Market Participants to interact with the ERCOT market. Services include market transactions, automated notifications, and market information.

- **ERCOT.com**: ERCOT’s public website.

- **Commercial/Retail API**: Programmatic point of entry for Retail Find Transaction and Find ESIID services.

- **Market Participant Identity Management (MPIM)**: Provides administration support of digital certificate access to ERCOT MIS Secure and Certified areas.
Market Data Transparency Service Level Agreement

ERCOT – 2018

- Market Management System User Interface (MMSUI): Point of entry for Market Transactions
- Outage Scheduler User Interface (OSUI): Point of entry for entering or managing outages

2.1.2 Service Characteristics

Hours of operation
ERCOT operates the hardware and software environment supporting the applications of this service 24 x 7, subject to scheduled maintenance windows. IT Operations supports these systems in Real-Time, 24 x 7.

Availability Targets
ERCOT targets IT Applications to be available at least 99% of the time outside of scheduled maintenance and release windows. The exception is MPIM, which is targeted to be available 95% of the time.

<table>
<thead>
<tr>
<th>Support Tier</th>
<th>Specification</th>
</tr>
</thead>
</table>
| Real-Time    | • Supported 24x7, 365 days a year, subject to scheduled maintenance windows.  
• Work until resolution for issues affecting system performance or availability  
• Problem and Issue Escalation happens in real-time |

Scheduled Maintenance Window
ERCOT reserves a Sunday maintenance outage window for IT applications. Notifications for planned maintenance during this window will be sent to the market at least 10 days prior to the planned outage.

- Sundays—6:00am until 9:00pm (15 hours)

Release Window:
- ERCOT will schedule 6 planned application releases per year during the following timeframe. Changes to this schedule will be managed as exceptions.
- Weekends **7:00pm Saturday until 12:00am Monday** (29 hours)

### 2018 Release Calendar

#### Weekend/Retail Release

<table>
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<tr>
<th>Release</th>
<th>Month</th>
<th>Weekend Release</th>
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<tbody>
<tr>
<td>Retail R1</td>
<td>Feb</td>
<td>10, 11</td>
</tr>
<tr>
<td>Retail R2</td>
<td>Apr</td>
<td>07, 08</td>
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<td>Retail R3</td>
<td>Jun</td>
<td>02, 03</td>
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<td>Retail R4</td>
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<td>11, 12</td>
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<td>Retail R5</td>
<td>Oct</td>
<td>27, 28</td>
</tr>
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<td>Retail R6</td>
<td>Dec</td>
<td>15, 16</td>
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#### Weekday Release

<table>
<thead>
<tr>
<th>Release</th>
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<tbody>
<tr>
<td>R1</td>
<td>Feb</td>
<td>06 – 08</td>
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<td>R2</td>
<td>Apr</td>
<td>03 – 05</td>
</tr>
<tr>
<td>R3</td>
<td>May</td>
<td>29 – 31</td>
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<tr>
<td>R4</td>
<td>Aug</td>
<td>07 – 09</td>
</tr>
<tr>
<td>R5</td>
<td>Oct</td>
<td>23 – 25</td>
</tr>
<tr>
<td>R6</td>
<td>Dec</td>
<td>11 – 13</td>
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3. Reporting

3.1 IT Application Service Reporting

ERCOT will measure and report availability and performance in an incident log. This log will be updated monthly and made available on the ERCOT website at http://www.ercot.com/services/sla/. The format of this log is outlined in Section 6, MDT IT Application Incident Log.

Additionally, these results will be reported monthly through the ERCOT governance process that includes the Commercial Operations Subcommittee, the Technical Advisory Committee, and the ERCOT Board of Directors.

These reports will include availability and/or performance for the following:
- Market Information System (MIS)
- ERCOT.com
- Commercial/Retail API Availability
- Market Participant Identity Management (MPIM)
- External Web Services (EWS)
- Market Management System User Interface (MMSUI): Point of entry for Market Transactions
  Outage Scheduler User Interface (OSUI): Point of entry for entering or managing outages

Availability:
Availability is monitored through two methods, primarily through synthetic transactions which execute scripts against the IT applications at regular intervals. Upon returning a valid response, and not exceeding the timeout threshold, the IT application will be considered available. When this method cannot be used, the availability is calculated by system or hardware uptime, and outage detection through operational monitoring tools.

4. Service Availability Renegotiations and Change Control

Renegotiations of this SLA can be initiated by either Market Participants or ERCOT management by making a request through the stakeholder process. Changes outside the scope of this SLA, including delivery times required by protocols or market guides, will require use of the stakeholder process including Protocol revision requests.

Version control in the form of document version numbering will be maintained in this document as a means of providing a change control process.

5. Annual Review Process

ERCOT is committed to providing quality IT services to the competitive electric market in Texas. ERCOT intends that the IT services described in this document align with Market Participant requirements to the extent that is operationally feasible. To maintain alignment between the requirements of the Market Participants and the IT services delivered by ERCOT,
the services defined in this document will be reviewed at least annually in a workshop setting or through an appropriate stakeholder group meeting.

6. MDT IT Application Incident Log

A spreadsheet including the MDT IT Application Incident Log will be maintained by ERCOT in a single spreadsheet file along with supporting information. This spreadsheet can be accessed at the following location:

http://www.ercot.com/services/sla

The following worksheets / tabs are included as part of this spreadsheet:

- Introduction / How to use
- Annual summary of IT application availability
- Monthly summary of IT application availability
- Detailed incident data of IT application availability

Elements included in the ‘Detailed Incident Data’ tab are:

- Incident date
- Date of initial Market Notice (if applicable)
- Market Notice ID tag (if applicable)
- Incident start and end times and duration
- Application(s) impacted
- Extract or Report Impacted
- Service Impact
- Issue Description
- Root Cause
- ERCOT Protocols Missed (Y/N)
- Market impact – the impact of the incident to Market Participants and end use customers
- Root Cause Details
- Market Participant Input
- Identification method – the way that ERCOT learned of the incident (i.e. monitoring, notification from Market Participant, etc.)
- Resolution
- Date of any identified fix to be implemented
- Additional comments or notes
- Current Status

The annual and monthly summary worksheets summarize the market notice data in annual and monthly breakdowns.

7. Approvals
Appendix A: Definitions
This section contains definitions referred to in this document and of the commonly used acronyms.

- **Availability:** The ability of a component or IT service to perform its required function over a stated period of time
- **Degradation:** An event that causes the normal levels of ERCOT IT systems to be impacted while still allowing for minimal processing of or access to these systems
- **Incident:** Any event that causes the agreed levels of service of ERCOT IT systems to be impacted
- **Outage:** any incident resulting in the unexpected failure of a computer or network hardware system or software application. As measured by this SLA, an outage occurs when an application fails to return a valid response within the timeout window. This window is between 20 seconds and 90 seconds, depending on the application.
- **Planned outage minutes:** minutes used by ERCOT during the maintenance and release windows
- **Planned Outage:** A planned change in ERCOT IT systems that prevents users from being able to access the systems
- **Unplanned Outage:** An unplanned change in ERCOT IT systems that prevents users from being able to access the systems
- **Unplanned Outage minutes:** minutes retail transaction processing services were not available that are outside of the planned use of the maintenance and release windows

Appendix B: COPS Market Guide, Section 5: ERCOT Market Notice Communication Process, Table 2: E-mail Notification Subscription Lists

COPS Market Guide:
http://www.ercot.com/mktrule
Section 5, Table 2: E-mail Notification Subscription Lists

Subscribe at:
http://lists.ercot.com