Integrated Test Environment Users Guide

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Version Control

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<th>Version</th>
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1. **Introduction**

The purpose of this document is to provide information on how SPP’s customers can utilize Southwest Power Pool’s Integrated Test Environment (ITE). The ITE is an environment that emulates SPP’s production systems without affecting production.

This document discusses the available functionality, connectivity through FTP and web services and how to register to use the ITE.

2. **Description**

The Integrated Test Environment, ITE, contains production level applications that are available for testing by SPP’s customers. Many of the activities a customer can perform in SPP’s production environment will be available within the Integrated Test Environment.

The advantage of an ITE is to provide an environment which provides significant testing in a static environment with a consistent set of data. With this in mind, there will be times when the Integrated Test Environment will need custom data inserted for specific testing.

The primary purpose for the ITE is to assist SPP and customers with the integration of new or updated applications prior to promoting the applications to production. This is to provide all of SPP’s customers with a better customer overall experience. There will be periods of unavailability for SPP’s customers access the ITE. There will be notice in advance of the periods of unavailability.

The ITE will be available for SPP’s customers on a scheduled basis. SPP’s ITE schedule will be provided on SPP’s public web site.

During SPP testing the ITE will not be available for customer use. SPP will make every effort to ensure ITE functions like production when requested. However, depending on the complexity of changes there may be times when this request cannot be fulfilled within the requested time frame. During these times SPP will make every effort to meet the customer’s request(s).

If there is a specific need when using the ITE, this request must accompany the request to schedule time in ITE to SPP’s Customer Relations. To schedule time go to the section titled “How to Schedule Time” below.

*Since most of the servers for the Integrated Test Environment are running as a virtual server, the ITE is not designed for performance testing.*

3. **Functionality**

   A. **Tariff and Transmission**
      
      I. Submit Transmission Request
      II. Query Transmission Request
      III. SPP Simulated Transmission Request Approval
      IV. TLR Event Viewer via OASIS Web Site
      V. TRV Timing Requirements via OPS1 (TRV-TC – for the Transmission Customer; only queries accepted and confirmed studies)
      VI. CAPSUM Application in OPS1 (providing interface limit or “Contract Path” limits information

   B. **Scheduling**
      
      I. Tag Submission
      II. Schedule Submission
      III. SPP Validation
IV. Losses
V. RTOSS/NLS
VI. RSS Events
VII. Webdata Transfer
C. Day Ahead Market
   I. Resource Plan Submission\Query – Portal and API
   II. Ancillary Service Capacity Submission\Query – Portal and API
   III. EIS Offer Curve Submission\Query – Portal and API
   IV. MP Load Forecast Submission\Query – Portal and API
   V. All Outbound Market XML Notifications (i.e. Dispatch, URDInterval, InvalidResource, etc)
   VI. SFTDA Simulation
   VII. Offer Caps Posting via Corporate Web
VIII. LIP Posting via Corporate Web
IX. SLIP Posting via Corporate Web
X. Download Stubbed Settlement Statement\Invoices – Portal and API
XI. Download Stubbed Invoices – Portal and API
XII. Create\Query Service Request
XIII. Market Participant Control Area Reports via Report Tool – OPS1 and https://reports.itespp.org

D. Reliability
   I. Submit Operations Load and Capability via OPS1
   II. Hourly Load Submission via OPS1 and FTP
   III. Load Forecast Submission via OPS1 and FTP
   IV. Unit Commitment Submission via OPS1 and FTP
   V. SPP Regional Reports and CA Reports (Security Data Reports) via OPS1
   VI. Post Transmission Outages via OPS1
   VII. Post Generation Outages via OPS1
   VIII. ICCP
      1. Inbound through production
      2. Outbound through ITE
      3. Market Deployments

4. Network and Security

All traffic, except ICCP, will be available from SPP’s ITE via internet and SPPNET. The preferred method of communication with the ITE is SPPNET. Outbound traffic from SPP’s ITE will originate with unique and different NAT’d address for internet and SPPNET. ICCP will only be available over SPPNET.

Inbound traffic is through the URLs defined in the section below titled “URLs for the Integrated Test Environment”.

Users of SPP’s ITE should allow the unique NATd addresses only into their test system(s)/environment(s). This is to prevent test data from entering production system(s).

The SPPNet IP addresses will only resolve to the appropriate URL if the machines at the customer end uses our SPPNet DNS server.

**Note:**
To obtain a complete list of IPs for SPPNet and Internet please contact your Customer Relations Representative and they will provide this information to you in an encrypted format.
5. **ICCP**

ICCP functionality is available in the ITE. Users will send data to SPP’s production ICCP, but will receive data (such as Market Deployments) via ITE’s ICCP. In order for this to be achieved, users must configure the ICCP links with SPP in both the production and the ITE environments. Users need these links to be configured and tested before data can be exchanged. Detailed instructions and assistance configuring ICCP links can be given as needed by contacting twilliams@spp.org

6. **URLs for the Integrated Test Environment**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>URL</th>
<th>Description</th>
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<tbody>
<tr>
<td>OPS1 Portal</td>
<td><a href="https://sppoasis.itespp.org/ops1/home.cfm">https://sppoasis.itespp.org/ops1/home.cfm</a></td>
<td>The OPS1 Portal in ITE. Access to the following Market applications is through the OPS1 Portal: SFTDA application, LIP Credit Tool, SLIP Management, DSS Validation Tool, Offer Cap Admin and Reports Tool.</td>
</tr>
<tr>
<td>Secured OASIS</td>
<td><a href="https://sppoasis.itespp.org/oasis/swpp">https://sppoasis.itespp.org/oasis/swpp</a></td>
<td>OASIS used for transmission requests and queries.</td>
</tr>
<tr>
<td>Reports Portal</td>
<td><a href="https://reports.itespp.org">https://reports.itespp.org</a></td>
<td>The Reports Tool application in ITE. This application is also accessible through the OPS1 application.</td>
</tr>
<tr>
<td>OATI webTrans</td>
<td><a href="https://dev2.oatischeduling.com">https://dev2.oatischeduling.com</a></td>
<td>OATI website used for scheduling (RSS, RTOSS)</td>
</tr>
</tbody>
</table>

7. **Web Registration**

**Local Security Administrator Registration:**

All entities with users that require Transmission Customer or Transmission Provider level access to the SPP OASIS must complete a LSA Confirmation Form, http://www.spp.org/Publications/Local_Security_Admin_Confirm_Form.pdf, regardless of the certificate
vendor chosen. Your certificate requests will not be processed without the completed form which identifies a person that is legally responsible for the management of their user’s access rights to SPP systems. This form only has to be completed once per LSA, per registered entity. The LSA is responsible for the management of users and certificates on the SPP Systems.

**User Registration:**

These steps must be followed to register each individual user. These instructions assume that the user already has obtained and installed a certificate from an approved vendor as described above.

**Registration for Oasis, Ops1, and Reports**

2. Place Don Martin’s email address (dmartin@spp.org) in the “Email This Information to This Address” field.
3. Follow up with additional email from the listed Local Security Administrator (LSA) approving the request.
4. SPP will then enter this new user into the database with the permissions requested and a confirmation email will be sent back to LSA and individual user who requested access.

**Registration of Local Security Administrator (LSA) Certificate on Market Portal**

2. Email certificate information to the Customer Relations Representative for your company along with the phone number, NERC entity code, and LSA access (either market participant LSA or meter agent LSA) to be associated with the certificate.
3. This information will be entered into Portal systems by SPP and an email confirmation will follow.

**Registration of User Certificates on Market Portal**

2. Under the “Customer Relations” tab, mouse over the “Portal Users” option and select “Create” for a new user.
3. Enter new user contact information for new users.
4. Using information obtained from the “Detailed Certification Information” link from the SPP Oasis site (https://sppoasis.spp.org/ap/certificatetools/certificateinfo.asp) enter the **Certificate Serial Number** and **Certificate Issuer** information EXACTLY AS IT APPEARS from that page. Copy and pasting this information is beneficial, however be sure to not include leading or trailing blank spaces in either field.
5. Select appropriate roles for the user that’s being entered. Questions about roles can be directed to the appropriate Customer Relations Representative.
6. Click “Submit” and registration is complete.

**Registration of FTP Users for Reliability Data Submissions**

1. Send request for access to the FTP server for the ability to submit reliability data along with the following information: a) names of users requiring access b) entity for which data will be submitted. Information should be submitted to the appropriate Customer Relations Representative (CRR).
2. CRR will submit this information to an internal IT team via work ticket for the creation of folder and/or user creation and permissions.
3. After creation, confirmation information sent via email to requesting party excluding password information which will only be communicated via phone conversation.

**Registration for OATI webTrans**

2. Email certificate information to the Customer Relations Representative for your company. Include in the email comments that this is a request for access to RTOSS, your company name (transmission or generation) and the tagging user name and password ID, if you have a tagging account.
3. Follow up with additional email from the listed Local Security Administrator (LSA) approving the request for access. The LSA should also identify if this user should be set up with read only or read/write access.
4. SPP will then enter this new user into the database with the permissions requested and a confirmation email will be sent back to LSA and individual user who requested access.

**Items of Note**

1. Local Security Administrators (LSAs) for Oasis may also be LSAs for the Market Portal, however these two functions require different forms which can be obtained from your Customer Relations Representative.
2. Oasis LSA forms are signed to provide a designated point of contact for a calendar year. The new form will be sent each year in the month of November to existing LSAs for execution. No Oasis updates can be made without an executed LSA form on file.
3. Market Portal LSA forms are effective in perpetuity and any changes such as removing the access of a Portal LSA or adding a new Portal LSA must be communicated to SPP.

**8. How to Schedule Time**

Users will coordinate usage of SPP’s ITE with the SPP Customer Relations at CustomerRelations@spp.org. The Customer Relations Department will follow SPP’s internal processes for logging issues and requesting changes to the environment to complete customer’s testing. SPP Customer Relations team will work with SPP’s Resource Management team to schedule the requested time.

These requests must provide adequate time to fit into SPP’s testing schedule.

Please provide the following information:

- Contact Information, to include name, phone, email information and any other contact information.
- Type of testing requested
- Desired start date and length of test.
- Special versions of applications, if needed
- Special Data needs

**9. Notifications**

During external testing email notification of down time occurring during the established maintenance windows will be sent no later than close of business the day before the established window. Notification of down time due to emergency changes will be sent as soon as possible.
10. Appendix

Terms and Acronyms

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<thead>
<tr>
<th>Term/Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ITE</td>
<td>Integrated Test Environment</td>
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<tr>
<td>LSA</td>
<td>Local Security Administrator</td>
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APPROVALS

Approved by

Project Manager  Date

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Todd Liles  Date

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