RIOO Interconnection Services
TSP Sign Up Reference

Version 3.26.19
ERCOT RIOO IS Release Information

March 26, 2019

ERCOT announced the next release of Resource Integration and Ongoing Operations Interconnection Services (RIOO IS) on March 26, 2019.

Through the RIOO IS website, companies interested in proposing a new generation resource at a new or existing generation site authorize their Interconnecting Entity (IE) to submit an online generation interconnection request (INR) for the generation resource to be interconnected to the Texas power grid. The Transmission Service Provider/Transmission Distribution Service Provider (TSP/TDSP) who owns the power lines in the area of the proposed resource studies analyzes and studies the INR to determine the economic feasibility of the project and the effect the resource may have on the grid.

🔍 For the best user experience, ERCOT recommends using Google Chrome as the web browser for Interconnection Services. Using Microsoft Internet Explorer may cause some issues to occur, including page loading issues requiring multiple page refreshes; getting stuck on the login page unless the ERCOT Interconnection Services site and the authentication apps used are listed as trusted sites; and slow page loading.

Product Update in this Release

Online payment is now available for IEs to pay the fees associated with submitting an INR and a Full Interconnection Study (FIS) request. ERCOT accepts credit card payments and electronic checks (often referred to as automated clearinghouse electronic funds transfers, or ACH, payments) from personal checking and business accounts. The new online payment instructions are available in the INR and FIS Change Request sections in the RIOO IS IE User Guide.

Accessing the RIOO IS Website

You can access the RIOO Interconnection Services website from the Resource Entities page on the ERCOT website (ercot.com > Services > Registration and Qualification > Resource entities) using the blue Launch button (refer to page 1 of this guide).

The ERCOT RIOO Interconnection Services TSP Guide that provides information and instructions for viewing and working with the INR information is also available from the Resource Entities page.
About this Guide

This guide describes the steps Transmission Service Providers (TSPs) must follow to sign up through the Market Participant Identity Management (MPIM) system for an ERCOT Resource Integration and Ongoing Operations (RIOO) – Interconnection Services account. With an Interconnection Services account, a TSP can work with the online with the generation interconnection requests (INRs) submitted by Interconnecting Entities (IEs) for new generation resources to be connected to the Texas power grid.

!” Your TSP account login requires an email address that must be unique to ERCOT Interconnection Services; that is, you cannot use the same email address if you have multiple roles within the system.
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About the Interconnection Services Sign Up Process for TSPs

ERCOT has already set up the Interconnection Services account for you using information from your Market Participant Identity Management (MPIM) profile. You must request that your USA add the new GiNR_M_Operator role to your profile.

In addition, ask your USA to confirm that your phone number in the profile is a working smartphone at which you can receive text messages from an authentication app and the email address is current so you can receive the verification emails from ERCOT during the sign-up process. Note that the email address is your login user name.

After your USA has confirmed your information and added the role, you will receive an email to verify your account. When the Log In page displays, you must immediately request to change your password (which has been locked).

After going through the password change, you will set up your account authentication.

Understanding the Required Login Authentication

The ERCOT Interconnection Services application uses multifactor authentication for account login. This means that ERCOT asks you to enter your email account and create a password for the account as the first means of authentication. And then, you must use another means of authentication to verify your access attempt.

ERCOT suggests three different options for this second authentication factor:

- **Auth0 Guardian**, a free app that you can download to your smartphone (from the App Store or Google Play). During sign up, you hold your phone up to your computer and scan a bar code that the ERCOT system will use to identify you. Each time you attempt to log in with your ERCOT login credentials (your email address as your user name and your password that you created), Guardian pushes a new message to your smartphone where you are prompted to click an Allow button to verify that you have made the login request.

- **Or, Google Authenticator**, a different free app that you can download to your smartphone (from the App Store or Google Play). During sign up, you hold your phone up to your computer and scan a bar code that the ERCOT system will use to identify you. Each time you attempt to log in with your ERCOT login credentials (your email address as your user name and your password that you created), Authenticator pushes a new authentication code to your smartphone that you must enter into an ERCOT page to verify that you have made the login request.
• Or, **SMS Text Authentication**, which uses your text message-enabled mobile phone - not necessarily a smartphone – and is not as secure. During sign up, you are asked to submit your phone number. Each time you attempt to log in with your ERCOT login credentials (your email address as your user name and your password that you created), the SMS security system sends a 6-digit verification code that you must enter into the code verification page to authenticate your login request.

> If you have an authentication program already on your smartphone, you most likely can use that app to register and log in to Interconnection Services.

### Web Browser Considerations

For the best user experience, ERCOT recommends using Google Chrome as your web browser for ERCOT Interconnection Services. If you use Microsoft Internet Explorer, some issues may occur, including page loading issues that will require you to refresh your page from time to time and being stuck on the login page. If these errors occur, add your authentication app as a trusted site.

### Working through the Process

This process involves working through a series of pages on the ERCOT Interconnection Services website and several authentication screens on your mobile phone plus one verification email sent to your email account.

To accomplish the tasks involved with sign up, you must have:

• Access to the Internet to get to the ERCOT Interconnection Services website.

• An email address at which you can receive email during this process. This email address also serves as your user name for the account login.

• A mobile telephone number at which you can receive text messages during this process from the authentication app you select to use.

After your account is created successfully, you will be prompted to log in to your new account to be sure you can view the Interconnection Requests List page. Note that you will need to enter an authentication code sent to your phone as well as your login information.
Before you begin, you should:

- Have your email account open to your Inbox so you can open the email messages sent to your account during this process

- Have a text editor (such as Notepad or Word) file open that you named something like ERCOT Auth Information so you can easily copy in your recovery code as recommended when you work through this process

- Download either the AUTH0 Guardian or Google Authenticator authentication app from either the Apple Store or Google Play to your smartphone. (If you do not use a smartphone, you can use the SMS authentication methods described in this guide.)
Asking Your USA to Modify Your MPIM Profile

You must have the GINR_M_Operator role in your Market Participant Identity Management (MPIM) profile to access and use Interconnection Services.

If you do not have an MPIM profile, ask your USA to create one and be sure the GINR_M_OPERATOR role is added to the profile.

1. Call your USA to verify that your MPIM profile contains a:
   - Phone number for an actual working number you can access in order to receive calls from the authentication app.
   - User email address that you can access (not an alias) to receive emails from ercot.com during the sign-up process.

2. Ask your USA to add the GINR_M_OPERATOR role to your profile.
Working Through the Sign Up Process

After your USA confirms that your profile phone number and email address are accessible and the GINR_M_OPERATOR role has been added, it may take up to 15-20 minutes to get an email from ercot.com to continue through the sign up process.

Verify My Account Email

1. Open your email inbox and open the Verify your email message from ercot.com.
2. Click the VERIFY MY ACCOUNT button.
Congratulations Page

You are the owner of a ERCOT Interconnections Services account

3 Click the Continue button.

Log In Page

Log In

Don't remember your password?

4 On the Log In page, click the Don’t remember your password link.
Reset Your Password Page

5. Type in the email address associated with this account.

6. Click the SEND EMAIL button.

Password Change Request Email Message

If you do not receive this email, verify with company USA that the password listed in MPIM is a real email address - not an alias. If it is an alias, have the company USA update the email address to one that works.

7. Go to your email and open the email message with Reset your Password from ercot.com.

8. Click the CHANGE MY PASSWORD button.
Change Password Page

Enter a new password for

- your new password
- confirm your new password

9. Type in your new password.
10. Type in your new password again.
11. Click the Continue button.

Reset Successfully Page

Your password has been reset successfully.
Go to the top of your web browser and type in the following URL:
https://sa.ercot.com/ginr/

When this Authentication Method page displays, continue with the instructions for the authentication method you have selected. If you have chosen to use:

- Auth0 Guardian, continue with the next page
- Google Authenticator, continue on page 18
- SMS Text Authentication, continue on page 26
Option 1: Using Auth0 Guardian as the Authentication App

This section contains the steps for signing up for an Interconnection Services account, setting up Auth0 Guardian as your authentication app, and then logging in to verify your access.

Auth0 Guardian is in the process of updating certain product screens. Some of the screens pictured here may be replaced by those updated screen.

Authentication Method Page

1. Click the I've already downloaded it link. If you have not already downloaded the Auth0 Guardian app, you can download it now using one of the App Store or Google Play buttons on this page.

However, if you download the app now, Interconnection Services may time out and display the login page for you to start your sign up over again.
Bar Code Page

2 When this page displays, open your smartphone and click the Guardian app to open the app to the scanner.

Scan Bar Code Page (On Phone)

3 Position your phone over the bar code until the bar code border turns green to indicate it was scanned.
Recovery Code Page

In the event that you need to login without your device you’ll need a recovery code. Take a note and keep this somewhere safe:

VSUD - YJ3M - RDR0 - SSCR - 8Y4C - 8N53

☐ I have safely recorded this code

On this page:

A Copy this code and paste it into the file you opened earlier for this purpose (refer to page 2).

B Click the checkbox.

C Click the to continue.

Congratulations, You are all Set Page

Congratulations, you are all set.
In the future when logging in you’ll want your device handy.

Click the Continue link.
Sent Push and Remember This Browser Page

Before you go to your phone to get the Authenticator message, click the **Remember this browser** checkbox to avoid having to go to your phone to get the authentication message for the next 30 days.

Guardian Auth0 Notification (On Phone)

On your phone, locate the Interconnection Services message and click >.
Guardian Auth0 Push Message (On Phone)

Almost Done Page – Go to Your Email

9 And then, click the Allow button.

10 When this page displays, open your email Inbox and open the Verify your email message (from ercot.com).
Verify Account Email (in Your Inbox)

Welcome to RIOO - Resource Interconnection Services!

Thank you for signing up. Please verify your email address by clicking the following button:

Verify My Account

Thanks!
The Electric Reliability Council of Texas

If you did not make this request, please contact us by replying to this email.

Click the VERIFY MY ACCOUNT button.
Congratulations Page

Verifying Your Account Log In

Now you will log in using the user name (email address) and password created at sign up and your authentication app to be sure you can access your Interconnection Requests List.

Log In Page

12 Click the Continue button.

13 On this page:

A Type the email address you used to sign up.

B Type the password you created earlier. Note: If you do not remember your password, click the Don’t remember your password? link. Refer to Resetting Your Forgotten Password in the User Guide.

C Click the LOG IN > button.
Authentication Request Process (On Phone)

14 If you did not click the **Remember this browser** checkbox in an earlier step, you will need to go to your phone to authenticate again.

A Locate the Guardian message on your phone and swipe to open it.

B Tap the **Allow** button.
Your Interconnection Requests List Page

When you log into Interconnection Services, the Interconnection Request List displays with all submitted INRs that ERCOT has processed but the resources are not yet operational. We divided it in half for easier viewing.
Option 2: Using Google Authenticator as the Authentication App

This section contains the steps for signing up for an Interconnection Services account, setting Google Authenticator as your authentication app, and then logging in to verify your access.

Authentication Method Page

1. Click the Google Authenticator link. If you have not downloaded the Google Authenticator app, you can download it now using one of the App Store or Google Play buttons on this page.

   However, if you download the app now, Interconnection Services may time out and display the login page for you to start your sign up over again.
**Bar Code Page**

When this page displays, open your smartphone and click the Google Authenticator app to open it.

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**Scan Bar Code Page (On Phone)**

Position your phone over the bar code until the bar code border turns green to indicate it was scanned.
Recover Code Page

4 On this page:

A Copy this code and paste it into the file you opened earlier for this purpose (refer to page 2).

B Click the checkbox.

C Click the to continue.

Congratulations, You are all Set Page

5 Click the Continue link.
Option 2: Using Google Authenticator as the Authentication App

Authenticator App Code Page (On Phone)

Go to your phone for your authentication code from Authenticator and copy it.

Enter Code from Authenticator Page

Complete the following:

A Paste or type in the 6-digit code from the Authenticator screen on your phone

B Click the Remember this browser checkbox so you do not have to do this step for the next 7 days.

C Click the to continue.
Almost Done Page – Go to Your Email

Almost Done!
We've emailed a verification link to: lyniетestgoog@outlook.com.
Click the link in that email to finish creating your account

Need a new link?
Resend email.

Open your email Inbox and open the Verify your email message (from ercot.com).
Verify Account Email (in Your Inbox)

Welcome to RIOO - Resource Interconnection Services!

Thank you for signing up. Please verify your email address by clicking the following button:

Verify My Account

Thanks!
The Electric Reliability Council of Texas

If you did not make this request, please contact us by replying to this mail.

9 Click the VERIFY MY ACCOUNT button.

Congratulations Page

Congratulations!
You are the owner of an ERCOT Interconnections Services account

Continue

10 Click the Continue button.
Verifying Your Account Log In

Now you will log in using the user name (email address) and password created at sign up to be sure you can access the Interconnection Request List.

Log In Page

On this page:

A Type the email address you used to sign up.

B Type the password you created at sign up.  
Note: If you do not remember your password, click the Don’t remember your password? link. Refer to Resetting Your Forgotten Password in the User Guide.

C Click the LOG IN > button.

** If you did not click the Remember this browser checkbox or 7 days have gone by since your last login, the Get Verification Code page displays after you finish this page.

Go to your mobile phone and open Authenticator. A new code should display.

Type in the 6 numbers of your new code.

Click to continue to the Interconnection Request List page.
Your Interconnection Requests List Page

When you log into Interconnection Services, the Interconnection Request List displays with all submitted INRs that ERCOT has processed but the resources are not yet operational. We divided it in half for easier viewing.

### Interconnection Request List

<table>
<thead>
<tr>
<th>Action</th>
<th>TSP</th>
<th>INR Number</th>
<th>Project Name</th>
<th>Tech Type</th>
<th>MW</th>
<th>POI</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>CITY OF AUSTIN DBA AUSTIN ENERGY (TDSP)</td>
<td>21INR0205</td>
<td>LynMSolarFarm</td>
<td>CP</td>
<td>10</td>
<td>SE 199</td>
</tr>
<tr>
<td>View</td>
<td></td>
<td>21INR0206</td>
<td>Lyn3</td>
<td>HY</td>
<td>5000</td>
<td>POI</td>
</tr>
<tr>
<td>View</td>
<td>CENTERPOINT ENERGY HOUSTON ELECTRIC LLC (TDSP)</td>
<td>22INR0217</td>
<td>Lyn Power2</td>
<td>WT</td>
<td>9600</td>
<td>71 just west of Smithvil</td>
</tr>
<tr>
<td>View</td>
<td></td>
<td>22INR0218</td>
<td>Lyn2AddOn</td>
<td>WT</td>
<td>900</td>
<td>SE Corner of 71 &amp; 21</td>
</tr>
</tbody>
</table>

### Interconnection Request List

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Option 2: Using Google Authenticator as the Authentication App
Option 3: Using the SMS Text Message Authentication Method

This section contains the steps for signing up for an Interconnection Services account, setting your authentication, and then logging in to verify your access.

Authentication Method Page

![Authentication Method Page]

Phone Number Page

![Phone Number Page]

1. Click the SMS link.

2. Type in a valid mobile phone number for ERCOT to send you an authentication code and then click the button to continue to the next page.
Option 3: Using the SMS Text Message Authentication Method

SMS Message on Phone

3. Open your phone and look for the verification code message.

Enter the Authentication Code Page

4. On this page:

A. Type in the 6 numbers of the verification message displayed on your phone.

B. Click the Remember this browser checkbox to avoid having to do this for the next 7 days.

C. Click the button to continue to the next page.
Recovery Code Page

In the event that you need to login without your device you’ll need a recovery code. Take a note and keep this somewhere safe:

VXUD - YM3J - DRR9 - SSCR - 8Y4C - 8N83

☐ I have safely recorded this code

On this page:

A Copy this code and paste it into the file you opened earlier for this purpose (refer to page 2).

B Click the checkbox.

C Click the button to continue.

Continue Page

Congratulations, you are all set.

In the future when logging in you’ll want your device handy.

6 Click the Continue link.
Almost Done Page – Go to Your Email

We've emailed a verification link to: lynietestauth0@outlook.com. Click the link in that email to finish creating your account.

Need a new link? Resend email.

Open your email Inbox and open the Verify your email message (from ercot.com).

Verify Account Email (in Your Inbox)

Welcome to RIOO - Resource Interconnection Services!

Thank you for signing up. Please verify your email address by clicking the following button:

VERIFY MY ACCOUNT

Thanks!
The Electric Reliability Council of Texas

If you did not make this request, please contact us by replying to this mail.

Click the VERIFY MY ACCOUNT button.
Congratulations Page

![Congratulations Page]

9. Click the **Continue** button.

Verifying Your Account Log In

Now you will log in using the user name (email address) and password created at sign up to be sure you can access the Interconnection Request List.

Log In Page

![Log In Page]

10. On this page:

   A. Type the **email address** you used to sign up.

   B. Type the **password** you created at sign up. 
   **Note:** If you do not remember your password, click the link. Refer to Resetting Your Forgotten Password in the User Guide.

   C. Click the **LOG IN >** button.
** If you did not click the **Remember this browser** checkbox or 7 days have gone by since your last login, the **Get Verification Code** page displays after you finish this page.

11 Go to your phone and open the message.

12 On this page:

A Type in the six numbers of the verification message displayed on your phone.

B Click the **Remember this browser** checkbox to avoid having to do this for the next 7 days.

C Click the button to continue to the next page.
Your Interconnection Requests List Page

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<th>Projected Energization</th>
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<th>Stability Study Start</th>
<th>SSR Study Start</th>
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