



RIOO User Guide – Creating a New Load Resource

Version 2.0
November 11, 2024

ERCOT RIOO Interconnection Services

To create a new Load Resource (LR) and to get it interconnected to the ERCOT Network Model, the Resource Entity (RE) representing the LR must use the Resource Integration and Ongoing Operations – Interconnection Services (RIOO – IS) application. RIOO – IS allows the RE to create an Interconnection Request (INR) for a new LR. The ERCOT Demand Integration team will review and process the INR. And, the RE can view the current status of the INR in RIOO throughout the timeline from the initial submission to when the new LR is loaded into the production Network Model.

About this guide

This guide provides information about performing the tasks in RIOO – IS to create and submit the INR that proposes a new LR to interconnect to the ERCOT Network Model. Any sample data used to demonstrate the application is fictitious and does not represent actual LR registration data or market activity for any Resource Entity or Transmission and/or Distribution Service Provider (TDSP) used in the samples. The samples are test data created to provide visual aids for this user guide.

Customers who can change their Load in response to a Dispatch Instruction and can meet certain performance requirements may qualify to become LRs. Qualified LRs may participate in ERCOT's real-time energy market through Security-Constrained Economic Dispatch (SCED) and/or qualify to provide any of the following Ancillary Services (AS): ERCOT Contingency Reserve Service (ECRS), Non-Spinning Reserve (Non-Spin), Regulation Down Service (Reg-Down), Regulation Up Service (Reg-Up), and Responsive Reserve (RRS).

In the ERCOT markets, the value of an LR's Load reduction is equal to that of an increase in generation by a generating plant. LRs in SCED submit bids to buy power up to their specified level and are instructed by ERCOT to reduce Load if wholesale market prices equal or exceed that level. LRs that are scheduled or selected in the ERCOT Day-Ahead AS Market are eligible to receive a capacity payment regardless of whether they are dispatched in Real-Time.

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Before starting your INR

Before starting your INR, be sure that you have done the following tasks:

Sign up for a RIOO Services User Account for a Resource Entity

- The user must be associated with a registered RE.
- The RE's User Security Administrator (USA) must add the RIOORS_M_Operator role to the user's Market Participant Identity Management (MPIM) profile, commonly known as the digital certificate.
- After the role is added, an email request will be sent to complete the process of creating the user account, which involves changing the system-assigned password and associating your login information with a multifactor authentication (MFA) app on your mobile phone that verifies your login attempts.
- The **RE Sign Up Guide** provides more details for signing up for a RIOO Services User Account. This guide is available on the [Resource Integration webpage](#), under **RIOO Documentation**.

Check for electronic payment debit blocks

If you intend to submit INR payments by electronic checks drawn on your bank account (ACH payment instead of credit card), you should check with your financial institution to be sure you do not have an automatic debit block on your account for ACH transaction amounts. It may take at least two days to remove the block, which can cause processing delays for your INR. If you do have an automatic debit block on your account:

- Have your financial institution send you the form to authorize ACH transactions you will be making with ERCOT.
- On the form:
 - For Vendor, enter **Authorize.net**.
 - For Vendor ID, enter **1911718107**.
- Submit the form to your financial institution.

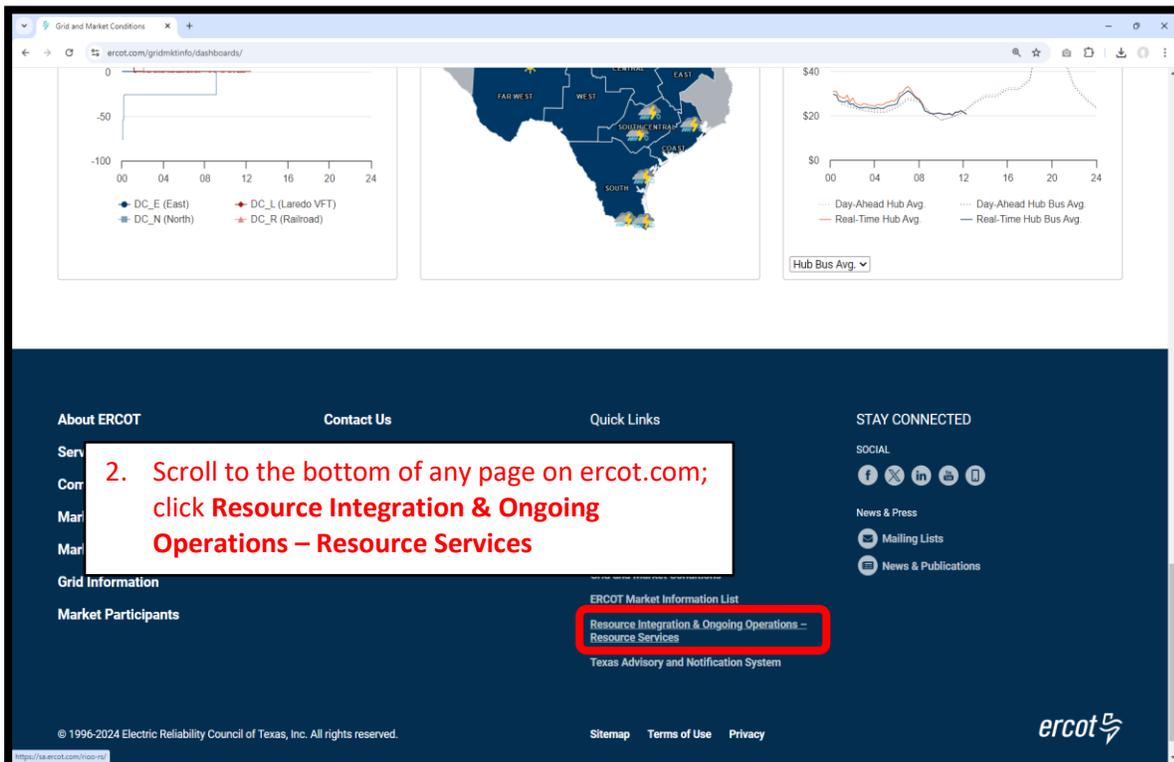
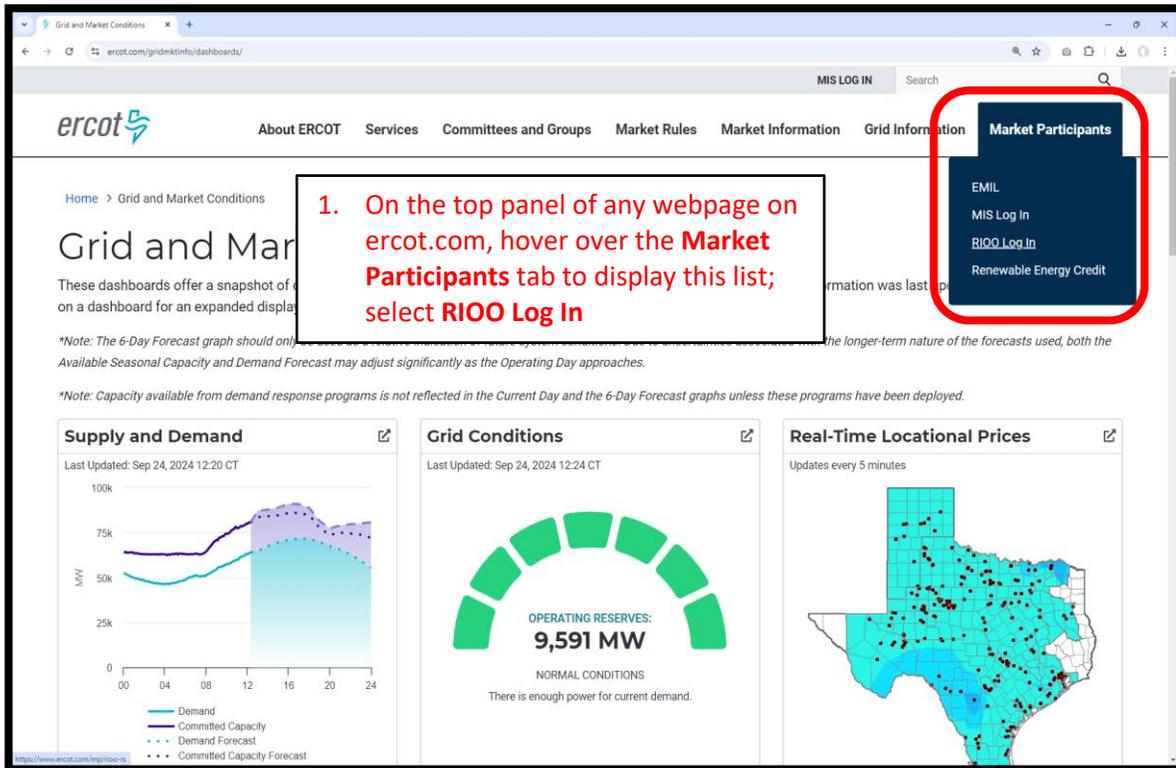
Coordinate a Production Load Date (PLD) and Dispatch Asset Code (DAC) for each new LR

When creating an INR for a new LR, the RE will need to request a PLD in RIOO during the registration process. The RE should coordinate the PLD via email with the ERCOT Demand Integration team (ERCOTLRandSODG@ercot.com). This coordination is not required, but it can help ensure that the requested PLD is acceptable for modeling the LR.

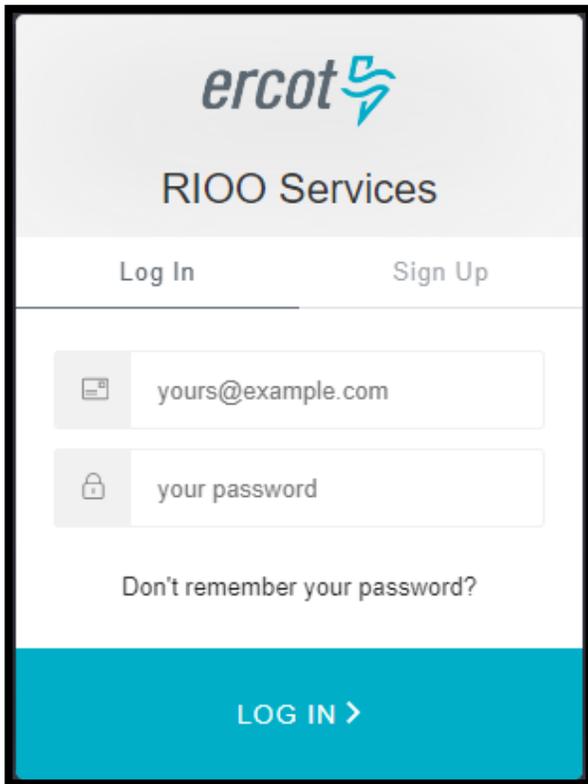
- The PLD must align with a scheduled production model load as listed on the current [Production Load Schedule](#).
- The PLD will be at least 45 days after the RIOO registration submission is accurately completed.
- The RIOO application will indicate that if the requested PLD is fewer than 90 days out, it is classified as an interim update. However, LR submissions meeting the 45-day PLD schedule do not require the RE to submit the **RE_Model_Interim_Update_Request** form.
- The DAC will be a unique identifier provided by ERCOT for each new LR, and it must be included in the RIOO submission.

Logging into RIOO

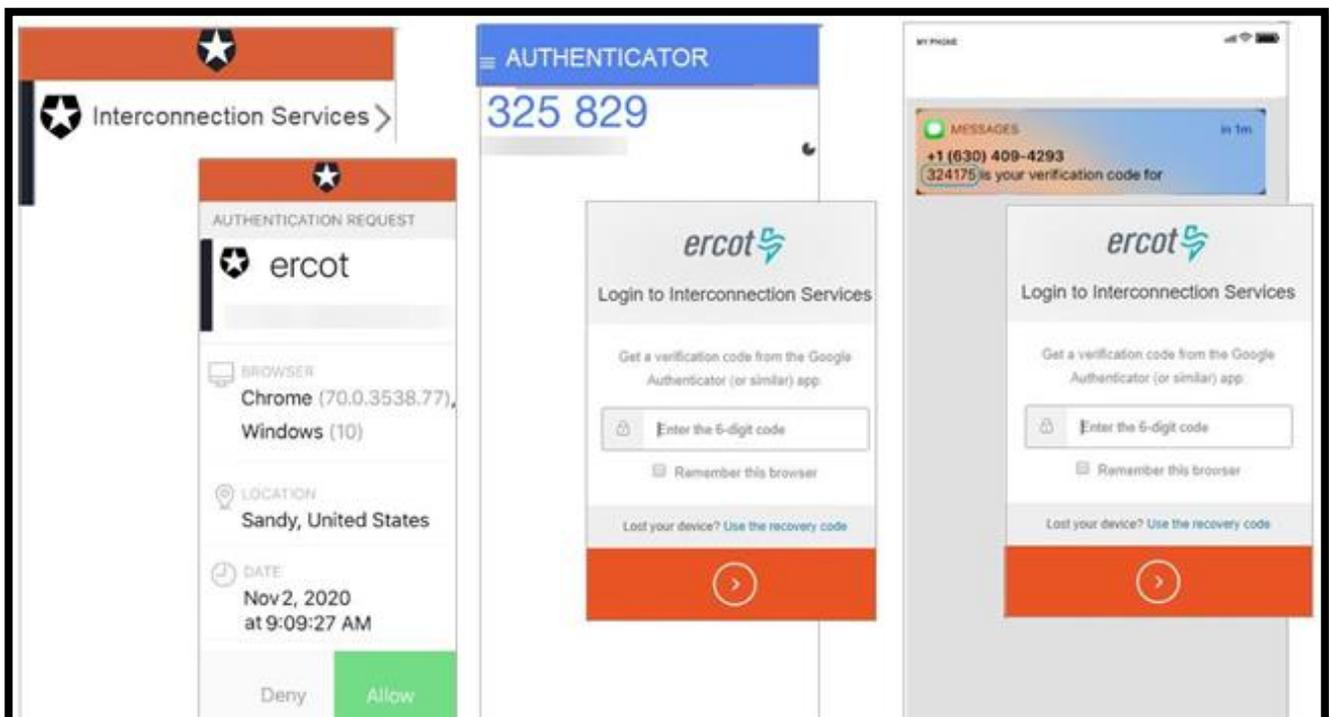
- There are two ways to access the RIOO application login screen. After a successful login, any of the RIOO application panels can be bookmarked for more direct access.



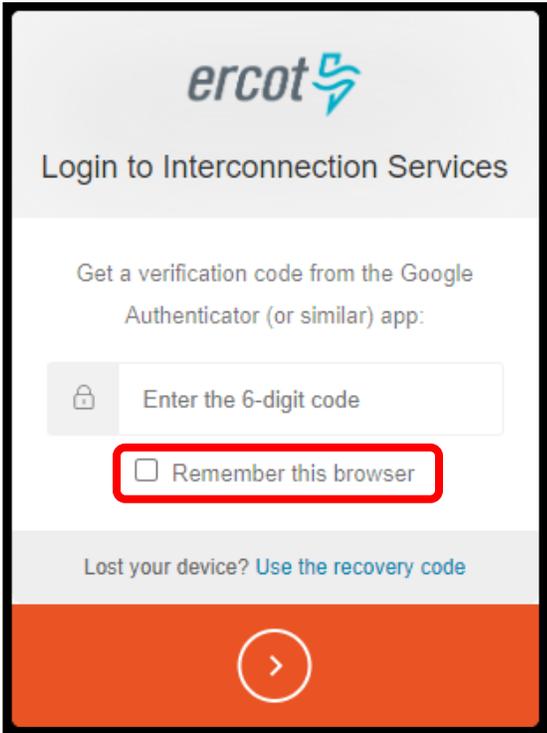
- Log into your RIOO account:



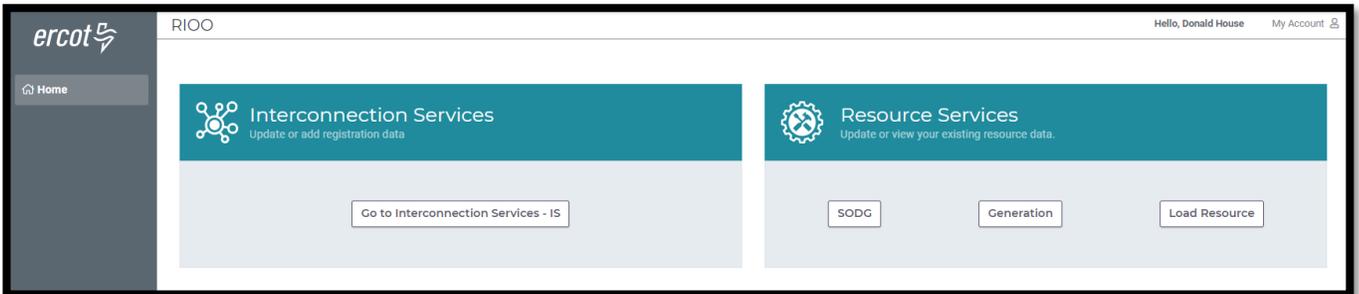
- You'll be prompted to enter a 6-digit code to complete the multi-factor authenticator (MFA). The MFA code will be sent to the app selected when setting up your account (Auth0 Guardian, Google Authenticator, SMS Text Authentication, or another authentication program that you chose to use).



- Select **Remember this browser** to avoid having to login multiple times:
 - *Note that if this selection is not made, there may be issues saving and submitting your data*



- After successfully logging in, you'll be taken to the RIOO home screen:

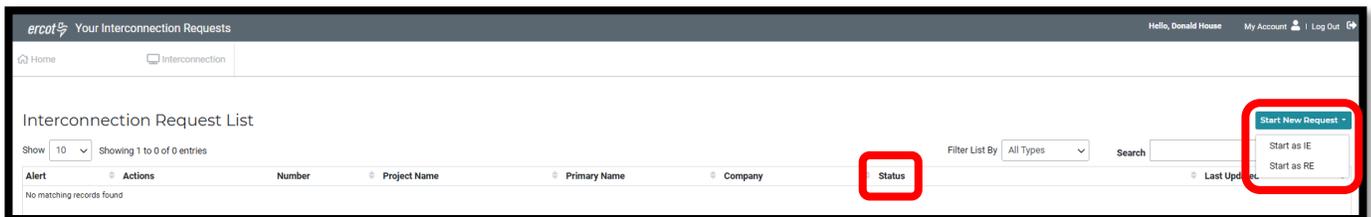


Creating request for a new LR

- On the RIOO home screen, open Interconnection Services
 - Interconnection Services is used to create a new LR
 - Resource Services is used to update an existing LR
 - See **RIOO User Guide – Updating an Existing Load Resource** for details



- The Interconnection Request List displays all requests that have been created by the RE along with the status of the request
- To begin, click on **Start New Request** to display the drop-down list
 - Select **Start as RE**



- Select the Company (RE) for this project
 - Note that if the user represents multiple REs, they will all be displayed in this drop-down list
- Select **Distribution Connected** (less than or equal to 60 kV) or **Transmission Connected** (greater than 60 kV) under **How will your project be connected?**
- Select **Yes** under **Project has Load Resource (LR)?**
- Enter **Project Name**
 - Note that Project Name is not the Dispatch Asset Code; this is a user-defined name
- Click **Let's Go!** to be taken to the LR list screen

ercot Create New Interconnection Request

Hello, Donald House My Account Log Out

Let's set your application type

Company Select your company for this project? (Required)
MP2 ENERGY LLC (RE)

Connection How will your project be connected?
 Transmission Connected
 Distribution Connected

Project has Load Resource (LR)?
 LR Yes No

Project Name (Required)
User Guide Test LR

Start Over Let's Go!

- On the LR List screen, all data submission panels are listed
 - **Start** indicates that nothing has been added to that panel
 - **Edit** in red indicates that the panel is either missing required information or that something needs to be corrected
 - **Edit** in green indicates that the panel has been completed but the user has the option to go back to the panel to make revisions
 - Clicking on **Edit** or **Start** will open that panel for data entry
- The panels can be completed in any order, but the way they are arranged in the application provides an orderly flow through the process
 - Progress can be saved, allowing the user to return to the application later to finish the submission
 - This guide will provide details on each panel

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Hello, Donald House Log Out

Home
Load Resource
 Back

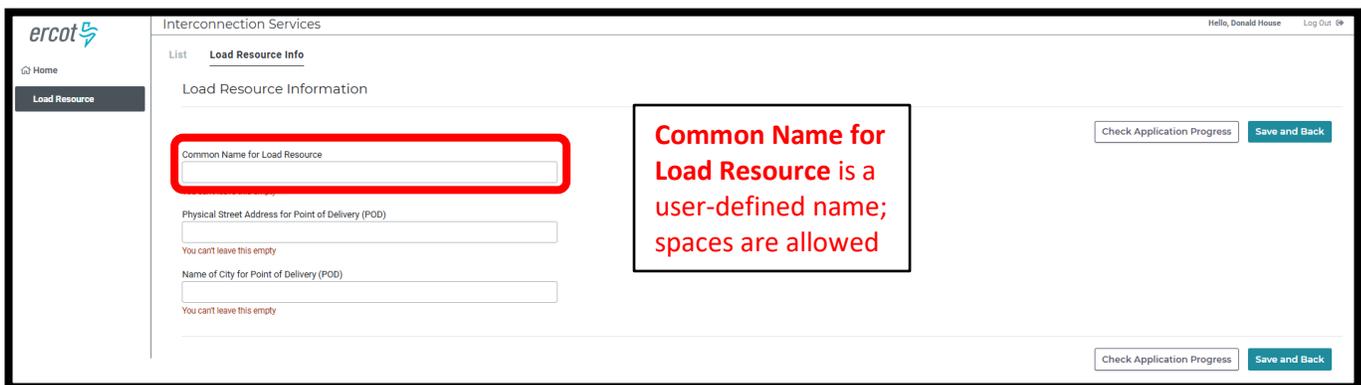
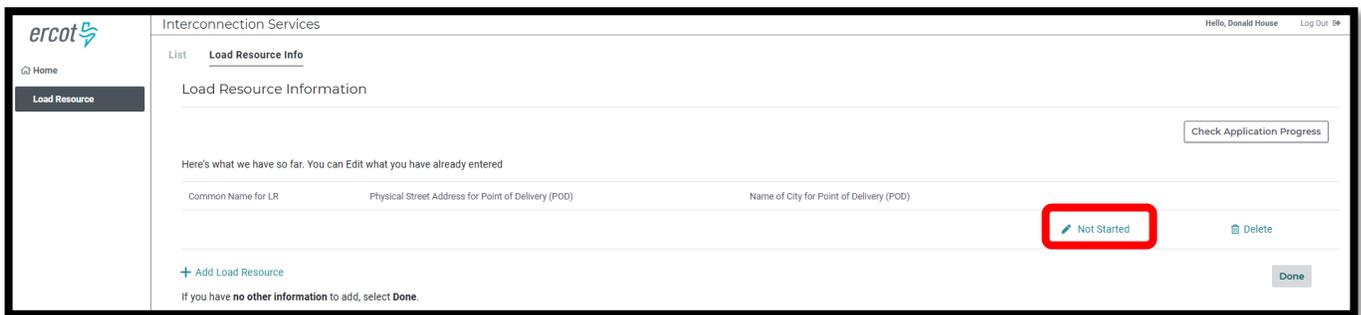
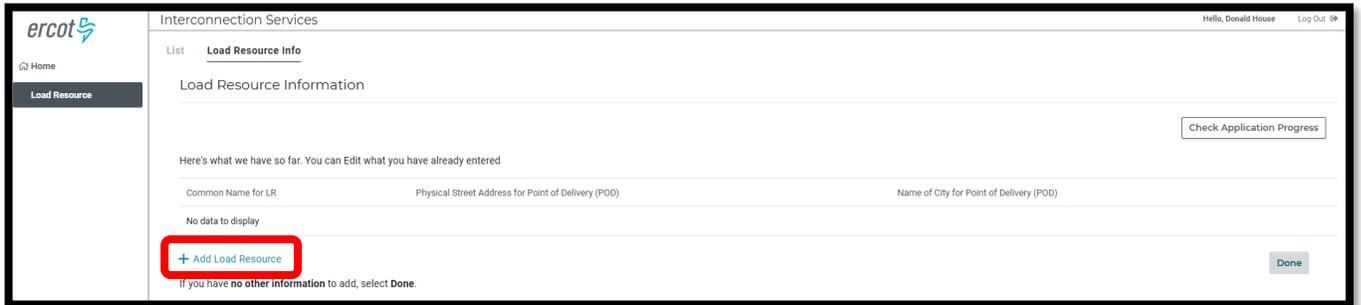
List

Panel Name	Status	Action
Load Resource Info	Required	Start
Data Agg and Settlement Info	Required	Start
Mapping Information	Required	Start
Limits & Op Params	Required	Start
E-sign	Required	Start

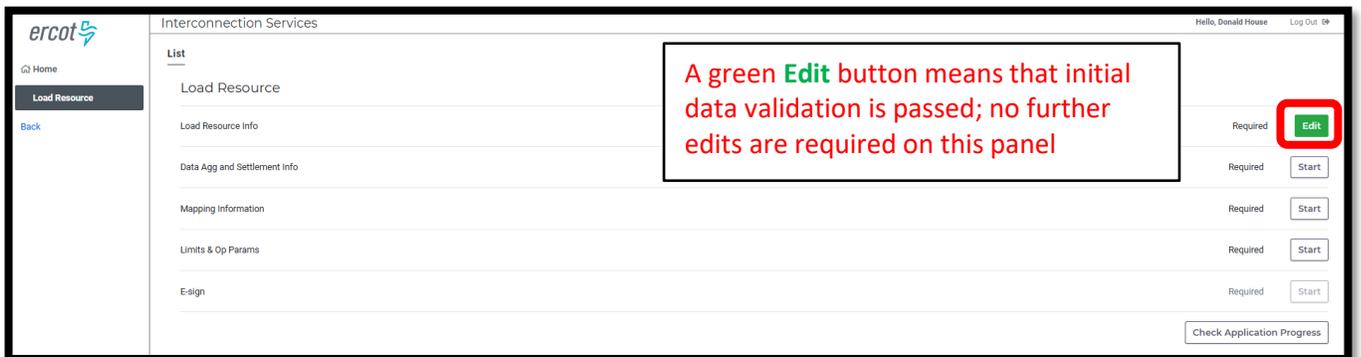
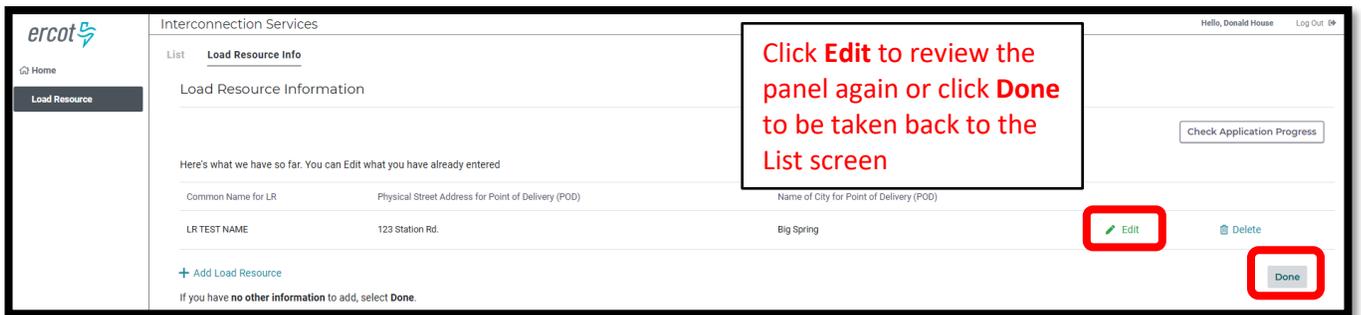
Check Application Progress

Load Resource Info

- On the LR List screen, click on **Start** to open the Load Resource Info summary screen
- Click on **+ Add Load Resource** and then on **Not Started** to open the data entry panel
 - Up to 40 LRs can be created in the same INR by completing the panels for each LR one at a time

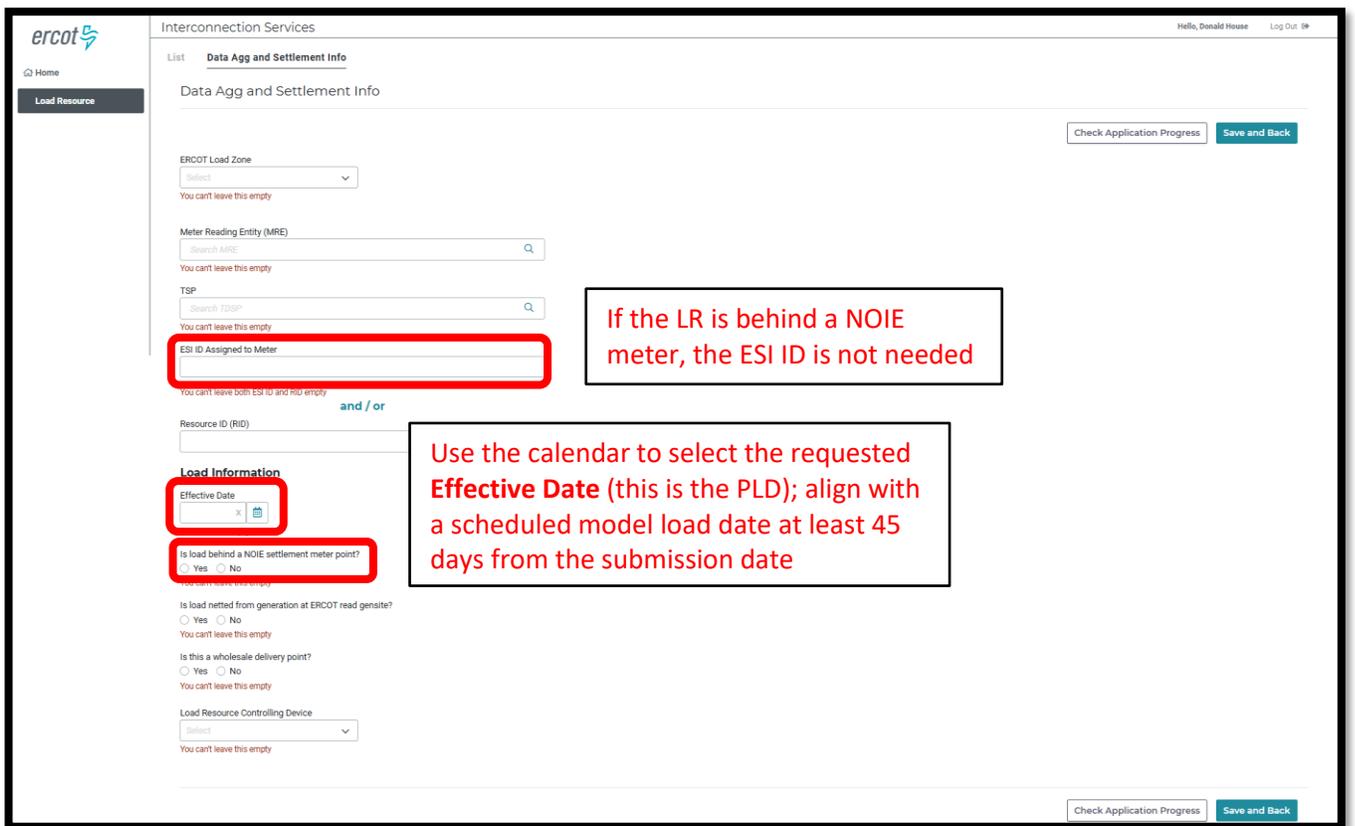


- Sample completed Load Resource Info panel



Data Agg and Settlement Info

- On the LR List screen, click on **Start** to open the Data Agg and Settlement Info summary screen
- Click on **Not Started** to open the data entry panel



- Sample completed Data Agg and Settlement Info panel

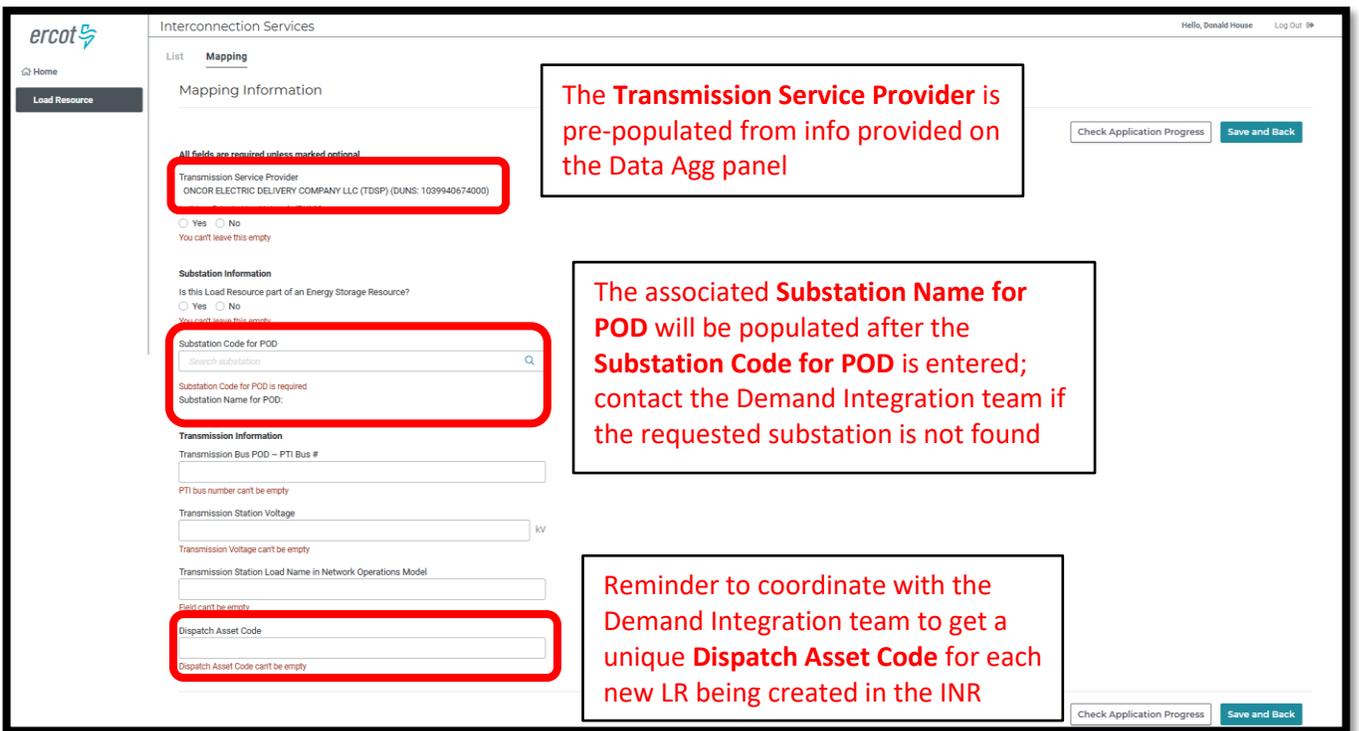
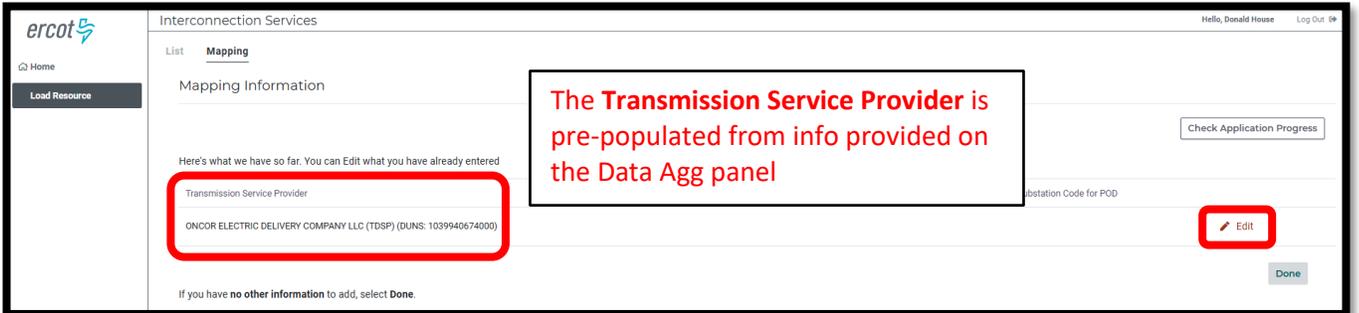
The screenshot shows the 'Data Agg and Settlement Info' form. A red box highlights the 'Meter Reading Entity (MRE)' and 'TSP' fields, which are populated with 'ONCOR ELECTRIC DELIVERY COMPANY LLC (TDSP)' and 'DUNS: 1039940674000'. A callout box states: 'The MRE and TSP DUNS #s are populated to match the user selections'. Another red box highlights the 'Save and Back' button, with a callout box stating: 'Click Save and Back to return to the Data Agg and Settlement Info summary screen'. The form includes fields for ERCOT Load Zone (West), Resource ID (RID), Effective Date (12-04-2024), and several radio button options for load characteristics.

The screenshot shows the summary screen for the 'Data Agg and Settlement Info' panel. A table displays the entered information: ERCOT Load Zone (West), Meter Reading Entity (MRE) (ONCOR ELECTRIC DELIVERY COMPANY LLC (TDSP) (DUNS: 1039940674000)), and TSP (ONCOR ELECTRIC DELIVERY COMPANY LLC (TDSP) (DUNS: 1039940674000)). A callout box states: 'Click Edit to review the panel again or click Done to be taken back to the List screen'. Red boxes highlight the 'Edit' and 'Done' buttons.

The screenshot shows the 'Mapping Information' panel. A callout box states: 'A green Edit button means that initial data validation is passed; no further edits are required on this panel'. Another callout box states: 'The TSP entered on the Data Agg panel is populated on the Mapping Information panel. A red Edit button is displayed for Mapping Information indicating that further info is needed.' Red boxes highlight the green 'Edit' button and the red 'Edit' button.

Mapping Information

- On the LR List screen, click on **Edit** or **Start** to open the Mapping Information summary screen
- Click on the **pencil Edit icon** to open the data entry panel



- Sample completed Mapping Information panel

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Interconnection Services

Mapping Information

All fields are required unless marked optional

Transmission Service Provider
ONCOR ELECTRIC DELIVERY COMPANY LLC (TDSP) (DUNS: 1039940674000)

Is this a Private Use Network (PUN)?
 Yes No

Substation Information

Is this Load Resource part of an Energy Storage Resource?
 Yes No

Substation Code for POD
BCATWIND

Substation Name for POD: BOBCAT BLUFF

Transmission Information

Transmission Bus POD – PTI Bus #
140401

Transmission Station Voltage
24.5 kV

Transmission Station Load Name in Network Operations Model
LOAD_3

Dispatch Asset Code
BCATWIND_LD1

Check Application Progress Save and Back

Check Application Progress Save and Back

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Interconnection Services

Mapping Information

Here's what we have so far. You can Edit what you have already entered

Transmission Service Provider
ONCOR ELECTRIC DELIVERY COMPANY LLC (TDSP) (DUNS: 1039940674000)

Is this a Private Use Network
No

Check Application Progress

Edit Done

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Interconnection Services

List

Load Resource

Load Resource Info

Data Agg and Settlement Info

Mapping Information

Limits & Op Params

E-sign

Required Edit

Required Edit

Required Edit

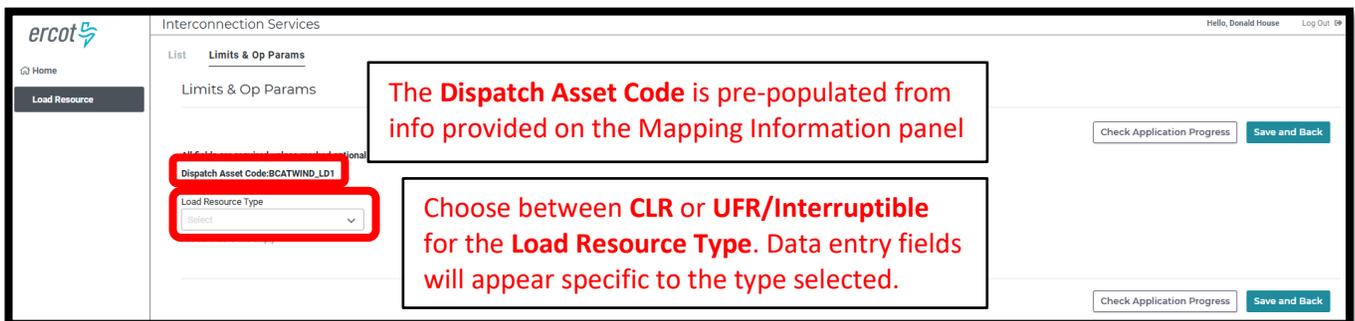
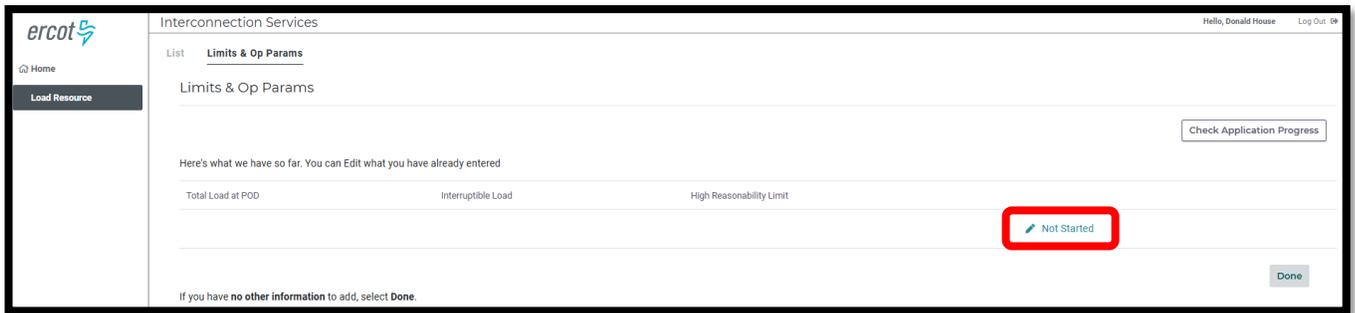
Required Start

Required Start

Check Application Progress

Limits & Op Params

- On the LR List screen, click on **Start** to open the Limits & Ops Params summary screen
- Click on **Not Started** to open the data entry panel
- User will choose the **Load Resource Type** as either **CLR** (controllable load resource) or **UFR/Interruptible** (under-frequency relay/interruptible, commonly known as non-controllable)
 - This guide will show the associated data entry fields for each type



Load Resource Type = CLR

Interconnection Services
List Limits & Op Params

Home Load Resource

All fields are required unless marked optional
Dispatch Asset Code:BCATWIND_LD1

Load Resource Type: CLR

Is this Load Resource an aggregated Resource?
 Yes No

Maximum Loads

Load at POD (MW)

Interruptible Load (MW)

Reasonability Limits

High Reasonability Limit (MW)

Low Reasonability Limit (MW)

Reasonability Ramp Rate Limits

High Reasonability Ramp Rate Limit (MW/min)

Low Reasonability Ramp Rate Limit (MW/min)

CLR Resource Parameters

Max Deployment Time (Hours)

Max Weekly Energy (MWhrs)

Normal Ramp Rate Curves

MW Rating (MW)

Upward (MW/min)

Downward (MW/min)

Emergency Ramp Rate Curves

MW Rating (MW)

Upward (MW/min)

Downward (MW/min)

Check Application Progress Save and Back

Callout Boxes:

- Contact Demand Integration if registering an ALR
- Load at POD (min = 0.1)
- Interruptible Load \leq Load at POD and \leq HRL
- HRL \geq 0 and \geq LRL; modeled as Max Power Consumption
- LRL \geq 0; modeled as Low Power Consumption (LPC)
- LRRL \leq HRRL
- Max Weekly Energy \leq Interruptible Load (MW) x 168 Hrs
- Emergency MW Rating \geq Normal MW Rating
- ERRC Upward \geq NRRC Upward, \geq LRRL, and \leq HRRL
- ERRC Downward \geq NRRC Downward, \geq LRRL, and \leq HRRL

Check Application Progress Save and Back

- Sample completed Limits & Op Params panel (CLR)

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Interconnection Services

Home

Load Resource

Limit Limits & Op Params

Limit

Limits & Op Params

Check Application Progress Save and Back

All fields are required unless marked optional
Dispatch Asset Code:BCATWIND_LD1

Load Resource Type
CLR

Is this Load Resource an aggregated Resource?
 Yes No

Maximum Loads

Load at POD
25 MW

Interruptible Load
25 MW

Reasonability Limits

High Reasonability Limit
25 MW

Low Reasonability Limit
0 MW

Reasonability Ramp Rate Limits

High Reasonability Ramp Rate Limit
25 MW/min

Low Reasonability Ramp Rate Limit
5 MW/min

CLR Resource Parameters

Max Deployment Time
8 Hours

Max Weekly Energy
4200 MWhrs

Normal Ramp Rate Curves

MW Rating
25 MW

Upward
25 MW/min

Downward
25 MW/min

Emergency Ramp Rate Curves

MW Rating
25 MW

Upward
25 MW/min

Downward
25 MW/min

Check Application Progress Save and Back

Click **Save and Back** to return to the Limits & Op Params summary screen

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Interconnection Services

Home

Load Resource

Limit Limits & Op Params

Limit

Limits & Op Params

Check Application Progress

Here's what we have so far. You can Edit what you have already entered

Total Load at POD	Interruptible Load	High
25	25	25

If you have no other information to add, select Done.

Check Application Progress Edit Done

Click on the pencil **Edit** icon to review the panel again or click **Done** to be taken back to the List screen

Load Resource Type = UFR/Interruptible (non-controllable)

The screenshot shows the 'Limits & Op Params' form for a 'UFR/Interruptible' load resource. The form is divided into several sections:

- Maximum Loads:** Includes 'Total Load at POD' (MW) and 'Interruptible Load' (MW).
 - Constraint: **Total Load at POD (min = 0.1)**
 - Constraint: **Interruptible Load \leq Total Load at POD and \leq HRL**
- Reasonability Limits:** Includes 'High Reasonability Limit' (MW) and 'Low Reasonability Limit' (MW).
 - Constraint: **HRL \geq 0 and \geq LRL; modeled as Max Power Consumption**
 - Constraint: **LRL \geq 0; modeled as Low Power Consumption (LPC)**
- Non-CLR Resource Parameters:** Includes 'Min Interruption Time' (Hours), 'Min Restoration Time' (Hours), 'Max Weekly Deployments', 'Max Interruption Time' (Hours), 'Max Daily Deployments', 'Max Weekly Energy' (MWhrs), and 'Min Notice Time' (Minutes).
 - Constraint: **Max Interruption Time \geq Min Interruption Time**
 - Constraint: **Max Weekly Energy \leq Interruptible Load (MW) x 168 Hrs**

Buttons for 'Check Application Progress' and 'Save and Back' are located at the top right and bottom right of the form.

- Sample completed Limits & Op Params panel (UFR/Interruptible)

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Interconnection Services

Hello, Donald House Log Out

List **Limits & Op Params**

Home

Load Resource

Check Application Progress Save and Back

All fields are required unless marked optional
Dispatch Asset Code:BCATWIND_LD1

Load Resource Type
UFR/Interruptible

Maximum Loads

Total Load at POD
25 MW

Interruptible Load
25 MW

Reasonability Limits

High Reasonability Limit
25 MW

Low Reasonability Limit
0 MW

Non-CLR Resource Parameters

Min Interruption Time
1 Hours

Min Restoration Time
3 Hours

Max Weekly Deployments
7

Max Interruption Time
24 Hours

Max Daily Deployments
1

Max Weekly Energy
4200 MWHrs

Min Notice Time
10 Minutes

Click **Save and Back** to return to the Limits & Op Params summary screen

Check Application Progress **Save and Back**

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Interconnection Services

Hello, Donald House Log Out

List **Limits & Op Params**

Home

Load Resource

Check Application Progress

Here's what we have so far. You can Edit what you have already entered

Total Load at POD	Interruptible Load	High
25	25	25

If you have no other information to add, select Done.

Click on the **pencil Edit icon** to review the panel again or click **Done** to be taken back to the List screen

Edit **Done**

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Interconnection Services

Hello, Donald House Log Out

List

Load Resource

Home

Load Resource

Back

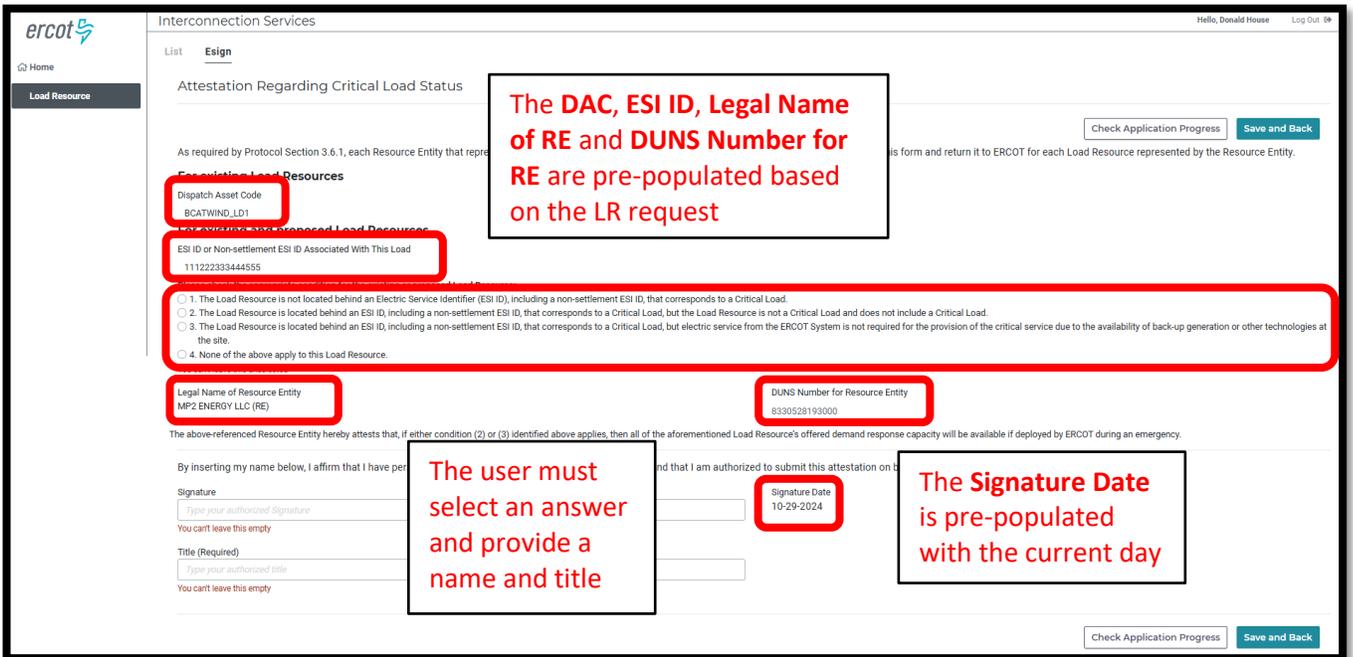
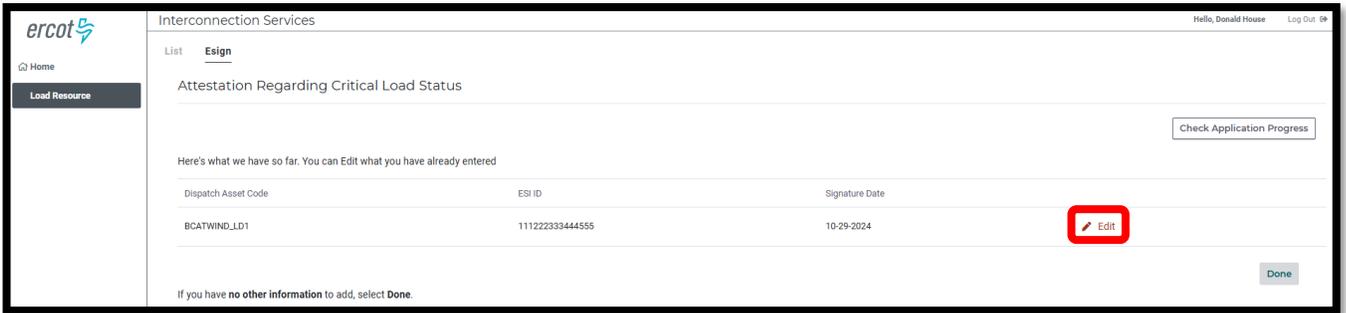
Check Application Progress

A green **Edit** button means that initial data validation is passed; no further edits are required on this panel

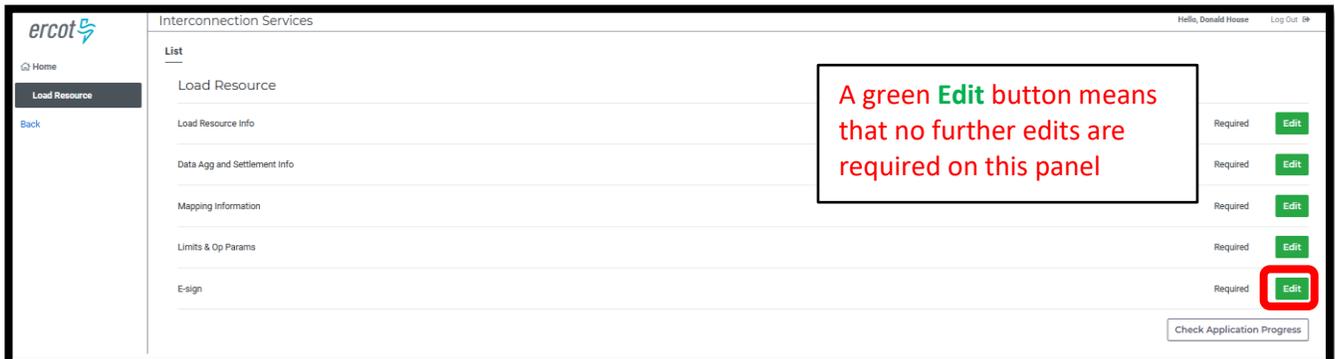
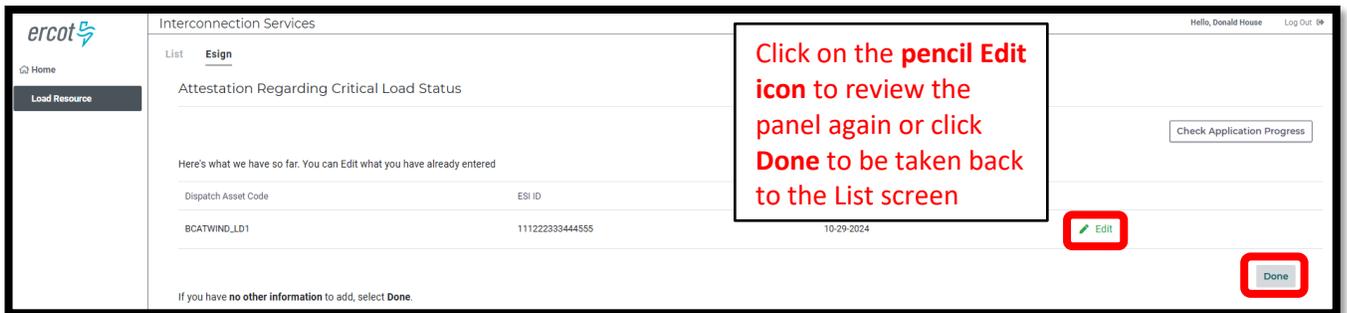
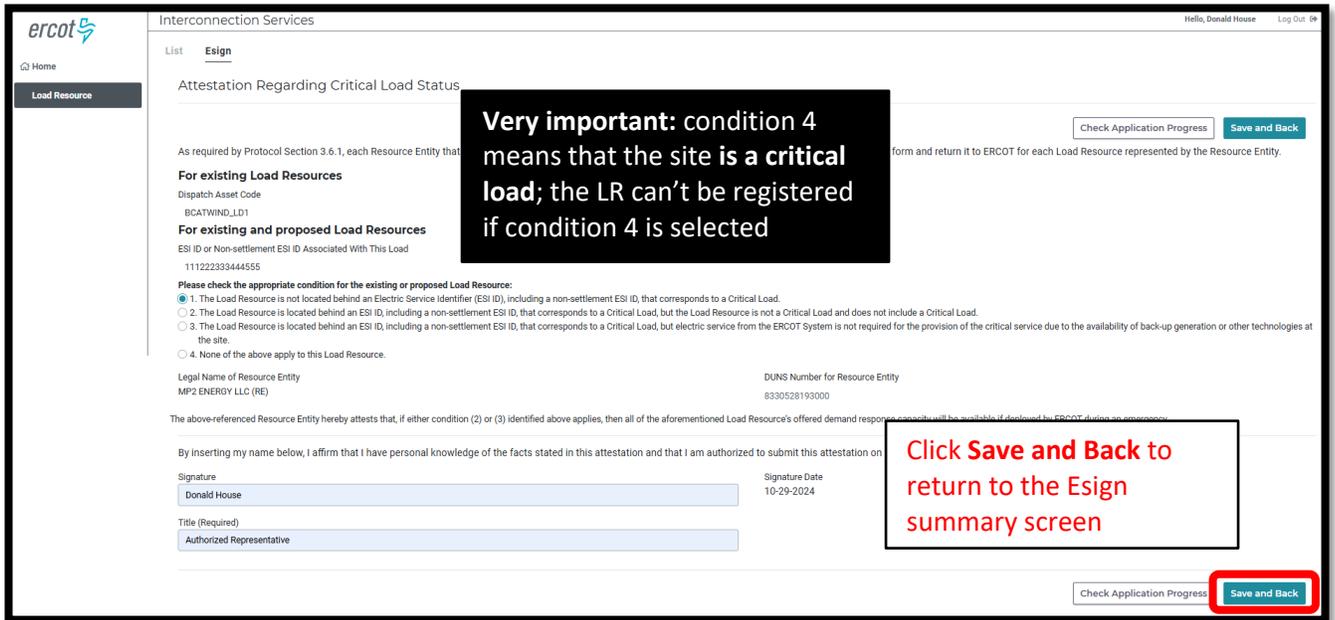
If all data passes initial validations, the **E-sign** panel will now be available to select

Esign

- ERCOT Protocol Section 3.6.1 requires each RE that represents a Load as a LR to complete the Attestation Regarding Critical Load Status for each LR represented by the RE; this attestation is built into RIOO and must be completed by the RE as part of the submission
- On the LR List screen, click on **Edit** to open the Esign summary screen
- Click on the **pencil Edit icon** to open the Esign data entry panel



- Sample completed Esign form

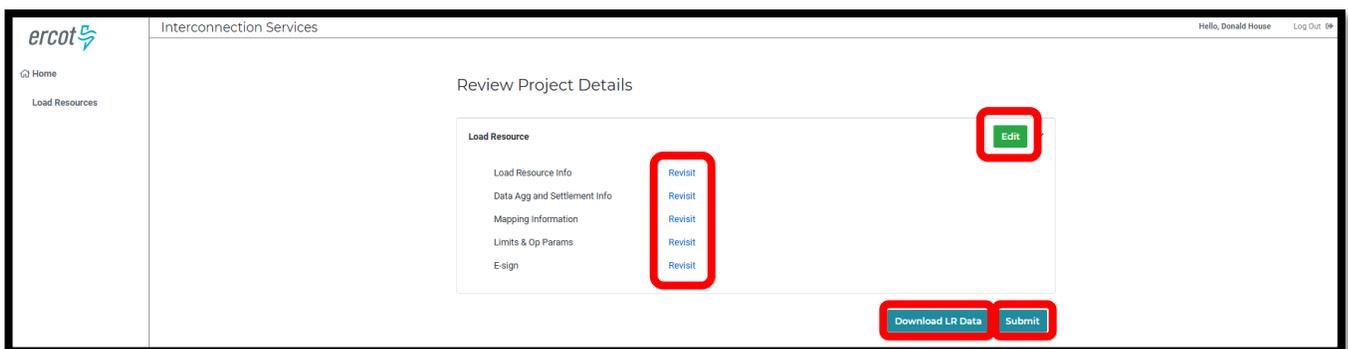


Check Application Progress

- On the LR List screen, click on **Check Application Progress** to open the Review Project Details summary screen



- On the Review Project Details screen, all data submission panels are listed
 - Click on **Revisit** to return to any of the data entry panels
 - Make Corrections** in red indicates that the panel is either missing required information or that something needs to be corrected
 - Any needed corrections will also cause **Edit** to appear in a red box
 - Edit** in a green box indicates that all panels have been completed but the user has the option to go back to any panel to make revisions
 - Clicking on **Download LR Data** will download an excel file with a separate tab containing the information added to each data entry panel
 - Clicking on **Submit** will save the request and move the user to the final items to be completed before the submission is sent to ERCOT (**this Submit button does not complete the process**)
 - Attachments (optional, such as one-line diagrams or PFR test results)
 - Payment



- When the data entry is complete, click **Submit** on the Review Project Details screen to move on to the payment screen
 - If you are taken back to the Interconnection Request List, click on **Finish** to view the **Finish Your Load Resource Request** screen

ercot Your Interconnection Requests

Home Interconnection

Interconnection Request List

Show 10 Showing 1 to 1 of 1 entries

Alert Actions Number Project Name Primary Name Company Status Last Updated

24LR0750 User Guide Test LR Donald House MP2 ENERGY LLC (RE) Saved 10-28-2024

Finish

24LR0750

Saved

The INR Number is populated here

The current status is Saved

ercot Finish Your Load Resource Request

LOAD RESOURCE REQUEST

24LR0750

Load Resource Details

You've already worked on this section. You can review information or make changes.

Review / Edit

Attachments

You've already provided required attachments. You can review attachments or make changes.

Review / Changes

Payment

You haven't entered any information yet. Ready to Pay

Ready to Pay

Are you sure?
You won't be able to revert this!

Yes, delete this INR No, do not Delete

Delete INR

Back to Dashboard

The INR can still be canceled by clicking on **Delete INR**; the user must confirm this selection to continue with the deletion (can't be canceled after ERCOT changes status to **In Review**)

The INR # is displayed here

LR submissions do not require any attachments

Click on **Back to Dashboard** to return to the Interconnection Request List

ercot Finish Your Load Resource Request

LOAD RESOURCE REQUEST

24LR0750

Load Resource Details

You've already worked on this section. You can review information or make changes.

Review / Edit

Attachments

You've already provided required attachments. You can review attachments or make changes.

Review / Changes

Payment

You haven't entered any information yet. Ready to Pay

Ready to Pay

Payment must be made before the submission can be completed; click on **Ready to Pay**

Delete INR

Back to Dashboard

Invoice and Payment

- Based on the current [ERCOT Fee Schedule](#), REs will be charged **\$500 for each new LR** to be added to the ERCOT Network Model
- This fee must be paid in RIOO to complete the LR submission
 - If there are multiple LRs created in the same RIOO submission, the total amount of fees due will be charged in the same invoice
 - **Refunds of fees paid will not be considered unless ERCOT directs a change in the registration process that results in additional fees being charged**
- Sample invoice

The screenshot shows the 'Invoice' page in the RIOO system. The page title is 'Finish Your Load Resource Request'. The breadcrumb trail includes Home, Interconnection, Load Resource Details, Attachments, Invoice, and Payment. The invoice details are as follows:

- LR Project Name:** User Guide Test LR
- ERCOT Logo Address:** 705 West Lake Drive, Taylor, Texas 76574, (512) 248-3000
- Request No.:** 24LR0750
- Invoice Date:** October 29, 2024
- Due Today:** \$500.00
- Table:**

DESCRIPTION	Quantity	PRICE
Load Resource	1	\$500.00
TOTAL DUE:		\$500.00
- Buttons:** Back, Print Invoice, Continue to Payment

Callouts on the screenshot:

- The LR project name is listed on the invoice** (points to 'User Guide Test LR')
- The Invoice Date is the current day, and the payment is always DUE TODAY** (points to 'October 29, 2024' and '\$500.00')
- The INR Request No. is listed on the invoice** (points to 'Request No. 24LR0750')
- Click Continue to Payment to move on to the Payment screen** (points to the 'Continue to Payment' button)

- Sample payment screen using credit card

The screenshot shows the 'Payment' page in the RIOO system. The breadcrumb trail includes Home, Interconnection, Load Resource Details, Attachments, Invoice, and Payment. The page title is 'Finish Your Load Resource Request'. The user is logged in as 'Donald House'.

Order Summary:

Description	Interconnection Studies performed	Total
		\$ 500.00

Payment Method: Credit Card (selected), Bank Account (USA Only)

Card Information: Invoice Number: 24LR0750, Card Number, Exp. Date, Card Code

Billing Address: First Name, Last Name, Billing Country: USA, Zip, Street Address, City, State, Phone Number

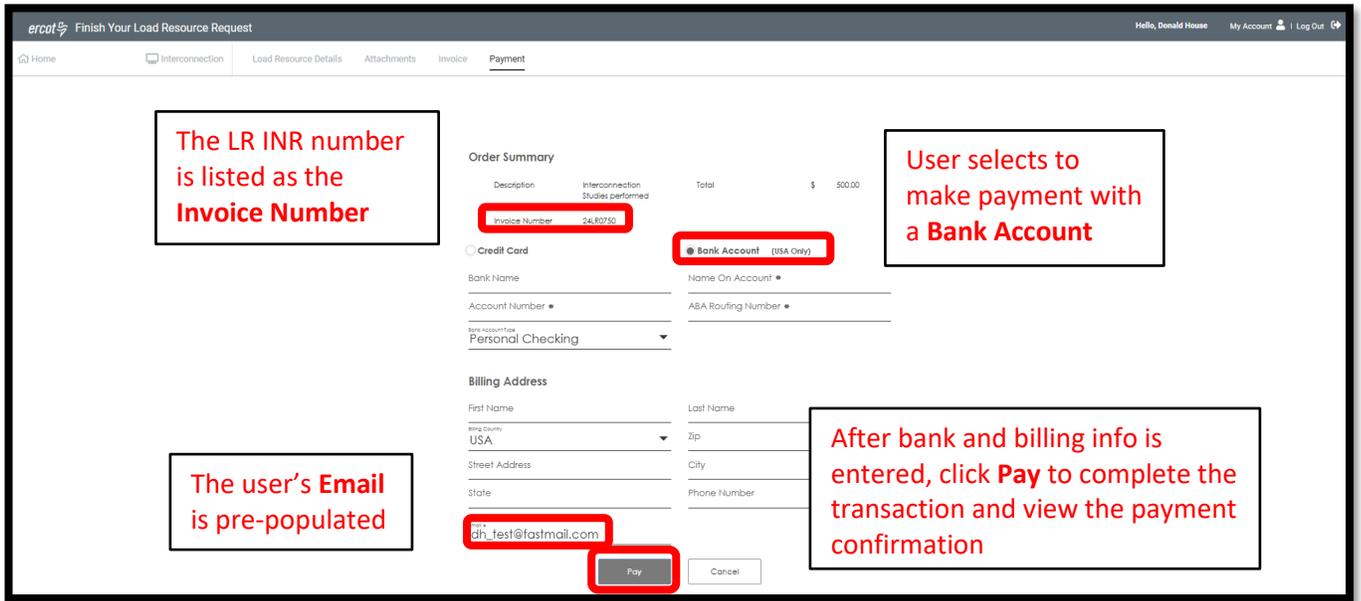
Pre-populated Email: dh_test@fastmail.com

Buttons: Pay, Cancel

Callouts on the screenshot:

- The LR INR number is listed as the Invoice Number** (points to 'Invoice Number 24LR0750')
- User selects to make payment with a Credit Card** (points to the 'Credit Card' radio button)
- The user's Email is pre-populated** (points to 'dh_test@fastmail.com')
- After info is entered, click Pay to complete the transaction and view the payment confirmation** (points to the 'Pay' button)

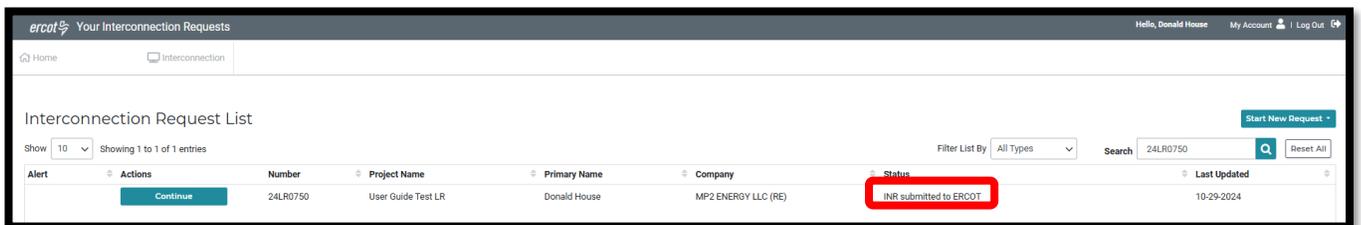
- Sample payment screen using bank account



- Sample payment confirmation



- Back on the Interconnection Request List, the user can view the newly submitted LR request
 - The status has changed to **INR Submitted to ERCOT**



After submitting INR

INR status

The INR submitter will receive automated emails from ERCOT with status updates as the request moves through the modeling process as well as any requests for revisions to the INR. The user can also view status changes on the Interconnection Request List.

- Status updates for a submitted INR include:
 - **INR submitted to ERCOT**
 - The user can still update the submission when in this status
 - **In Review**
 - ERCOT changes to this status after completing an initial review of the submission
 - User can't make updates when the INR is in this status
 - If updates are required, ERCOT will change the status to **Incomplete** to allow the user to make changes and resubmit (ERCOT will email the user to identify the needed updates)
 - INR will stay as **In Review** until it is approved for the model load
 - **Approved for Production**
 - ERCOT changes to this status after the modeling request has been fully tested and approved for the requested model load snapshot (usually 2-3 weeks before the PLD)
 - **In Production**
 - INR will change to this status on the PLD

Confirming new LR in production Network Model

After the PLD for the newly created LR, the Qualified Scheduling Entity (QSE) representing the LR is encouraged to verify that the LR is visible in the Market Manager for the appropriate markets (DAM, Real-Time, Ancillary Services). And, the RE should verify that the LR is visible in RIOO Resource Services (RIOO – RS). ERCOT will verify that the LR is in the production Network Model, but it is the responsibility of the RE/QSE to notify ERCOT if they notice any issues for the new LR.

Updating an existing LR

To update an existing LR, the RE must use the RIOO – RS application, which is accessed using the same RIOO user account. Refer to the RIOO User Guide – Updating an Existing Load Resource on the [Load Resource webpage](#) for details.



Troubleshooting RIOO issues

User account

If a RIOO user can't access the registration entry screens in RIOO – IS or can't view the existing Resources in RIOO – RS, there are some common reasons for these issues. The list below does not include all possible causes of access problems, but these are the most common issues experienced.

- Users can only make registration changes for REs for which they have a digital certificate with the RIOORS_M_Operator role assigned
 - ERCOT can't create the digital certificates or assign the role. This must be done by the RE's User Security Administrator (USA).
- If the user represents multiple REs, they must be sure to use the correct email address when logging into RIOO. Often, accounts are set up with different email addresses for the same user. If this is the case, the user needs to know which email address to use for each RE.
- A RIOO user can't be registered as both an RE and a TDSP on the same account. If the user needs to access RIOO as both types, then separate RIOO accounts must be created for each, and a different email address must be used for each account.

Problems viewing data or completing submissions

Although the user may be able to access the RIOO application, sometimes the session becomes stale and needs to be refreshed to view data correctly or to complete a submission. This often leads to the user being stuck in a loop of being sent back to the login screen or the main dashboard when navigating through the application.

- If the user experiences such an issue, and after any application outage (planned or unplanned), the user should logout of the application, clear their browser history cache, and then log back into the application.
 - Select “Remember this browser” when logging in
- If the user starts an INR but doesn’t attempt to submit it until sometime later (multiple days or more into the future), the user may not be able to submit the INR due to changes in the application from an update release or other registration data and/or network model changes that happened after the INR was started.
 - Data edits may not be validated, and the data panels won’t turn “green” even if all the required fields have been populated
 - The user may not be able to access the E-sign panel or to complete the payment processing
 - Any of these issues prevent the “submit” button from being activated
 - The logout/login process above is recommended to resolve any of these issues
 - If this doesn’t work, the submission may have to be canceled/withdrawn and a new submission will be needed
- If the payment process has been completed, but the user can’t submit the INR, there may be an issue with the third-party payment vendor. Sometimes, the payment confirmation isn’t sent correctly from the vendor to ERCOT.
 - If this occurs, the RIOO team can verify if the payment was received by the vendor. If payment was received, then the RIOO team will manually update the payment status in the database. This will allow the user to submit the INR.

Reporting issues

Any access problems, functionality issues, or suggestions for improvements to the application can be sent via email to RIOO-Help@ercot.com and ERCOTLRandSODG@ercot.com. Significant updates to the application may be communicated through market notices.