



RIOO User Guide – Updating an Existing SODG

Version 1.0
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ERCOT RIOO Resource Services

To update an existing Settlement Only Distribution Generator (SODG) site and to get the change into the ERCOT Network Model, the Resource Entity (RE) representing the site must use the Resource Integration and Ongoing Operations – Resource Services (RIOO – RS) application. RIOO – RS allows the RE to submit a Change Request (CR) online to update the registration information for an existing SODG site. The ERCOT Demand Integration team will review and process the CR and provide status updates to the RE throughout the timeline from the initial review of the request to getting the update loaded into the production Network Model.

About this guide

This guide provides information about performing the tasks in RIOO – RS to create and submit the online CR that proposes updates to an existing SODG in the ERCOT Network Model. Any sample data used to demonstrate the application is fictitious and does not represent actual SODG 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.

Distributed Generation with installed capacity greater than 1 MW capable of providing a net export of energy into a Distribution Service Provider's (DSP) Distribution System is required to register with ERCOT as an SODG. Resource Entities register SODGs using the [Resource Integration & Ongoing Operations \(RIOO\)](#) application. Instructions for setting up a RIOO user account can be found under RIOO Documentation on the [Resource Integration](#) webpage. The SODG registration process allows for energy injections to a DSP's Distribution System to be accounted for in ERCOT market settlements. Energy from registered SODG units is settled with the SODG's designated Qualified Scheduling Entity (QSE) per ERCOT Nodal Protocols section 6.6. Registering an aggregation of DG units across multiple points of delivery is not allowed.

Table of Contents

Before starting your Change Request.....	4
Sign up for a RIOO Services User Account for a Resource Entity	4
Have documents completed and ready to attach	4
Coordinate a Production Load Date (PLD).....	4
Important notes on Change Requests.....	5
Logging into RIOO	6
Overview of RIOO Resource Services.....	9
Change request for an existing SODG.....	11
Change Request example.....	15
Stopping an existing SODG.....	22
After submitting Change Request.....	23
Change Request status	23
Confirming updated SODG in production Network Model.....	23
Creating a new SODG.....	23
Reporting issues.....	23

Before starting your Change Request

Before starting your CR, 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 Resource Entity (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**.

Have documents completed and ready to attach

- If the SODG will be using a meter read by a TDSP, a [TDSP Read Generation Metering Registration Form](#) may be required with the CR submission. If the CR is changing any of the data included on the TDSP Read Form, or if the SODG will now be using a TDSP-read meter for the first time, then the RE must request that the host TDSP completes the form and the RE must attach it to the RIOO submission. If the CR does not impact the metering information, then the user does not need to attach the TDSP Read Form.
- If the SODG will be using an ERCOT Polled Settlement (EPS) meter, then the TDSP Read Generation Metering Registration Form is not needed.

Coordinate a Production Load Date (PLD)

When creating a CR for an existing SODG, 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 SODG.

- 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, SODG submissions meeting the 45-day PLD schedule do not require the RE to submit the **RE_Model_Interim_Update_Request** form.

Important notes on Change Requests

- Once a CR is submitted for an SODG, no other CRs can be submitted for that same SODG until the in-progress CR is effective in the production Network Model. This restriction is to prevent conflicting changes that couldn't be properly validated against an unknown model state.
- When a CR is submitted to stop an SODG, no other CRs can be submitted for that same SODG. See further details on [Stopping an existing SODG](#) in this guide.
- Based on the current [ERCOT Fee Schedule](#), there is no charge for submitting a CR for an SODG.

Logging into RIOO

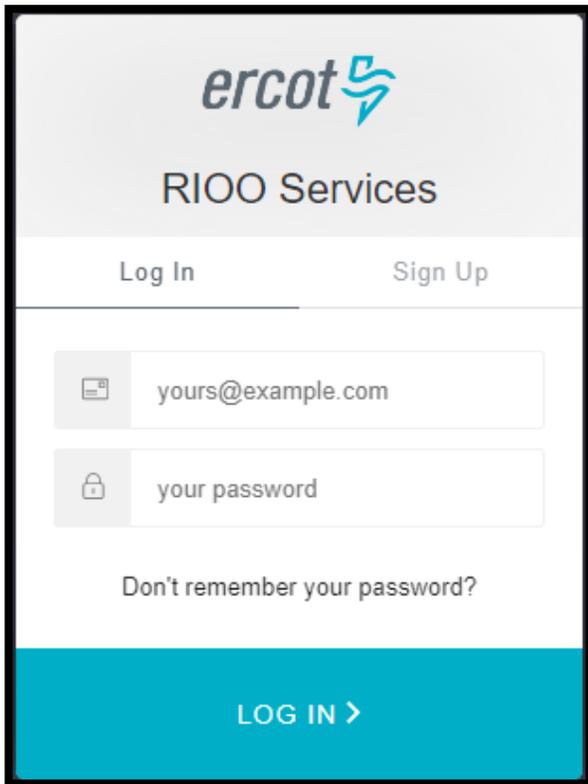
- There are two ways to access the RIOO application login screen:

1. On the top panel of any webpage on ercot.com, hover over the **Market Participants tab to display this list; select **RIOO Log In****

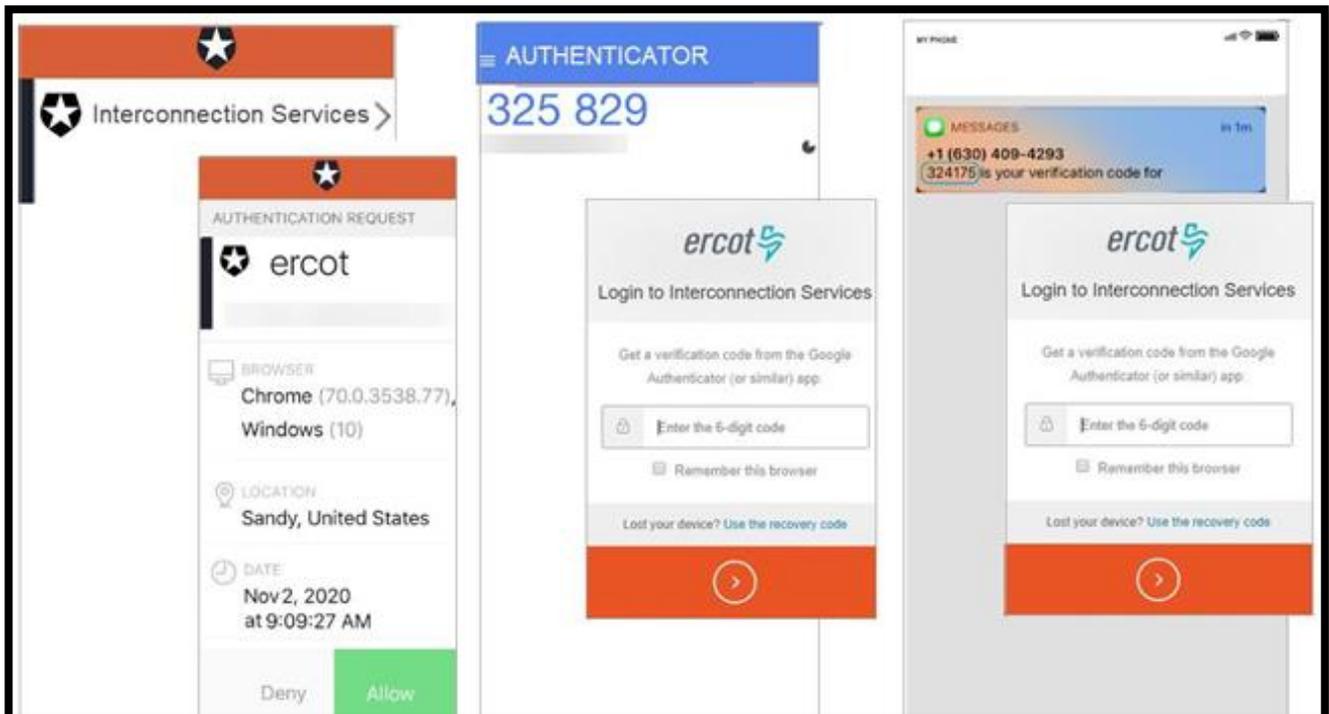
2. Scroll to the bottom of any page on ercot.com; select **Resource Integration & Ongoing Operations – Resource Services**

The screenshot displays the ERCOT website interface. At the top, there is a navigation bar with the ERCOT logo and a search bar. Below the navigation bar, a large banner features the text "We manage 90% of Texas power load, 1,030 power generation units, and 52,700 miles of transmission lines managed and monitored." A red box highlights the "Market Participants" dropdown menu, which includes options for "EMIL", "MIS Log In", "RIOO Log In", and "Renewable Energy Credit". Below the banner, there are three main data dashboards: "Supply and Demand", "Grid Conditions" (showing "OPERATING RESERVES: 7,271 MW"), and "Combined Wind and Solar". The bottom section of the page contains a footer with various links, including "Resource Integration & Ongoing Operations – Resource Services", which is highlighted with a red box.

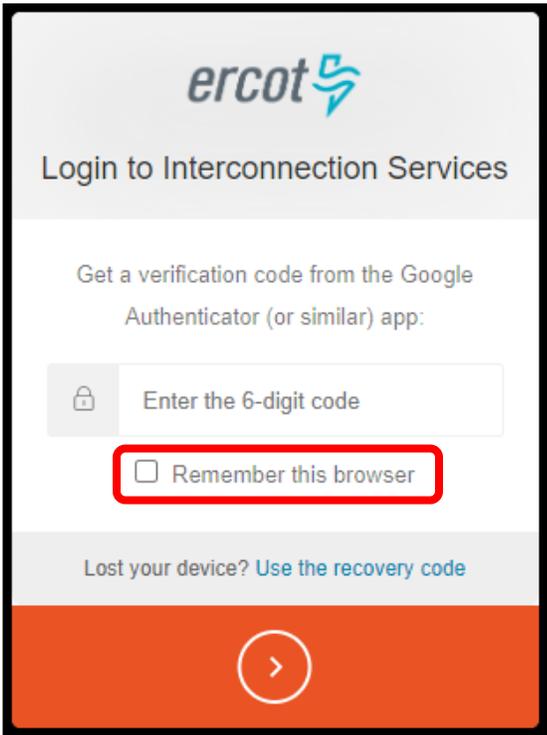
- Log into your RIOO account:



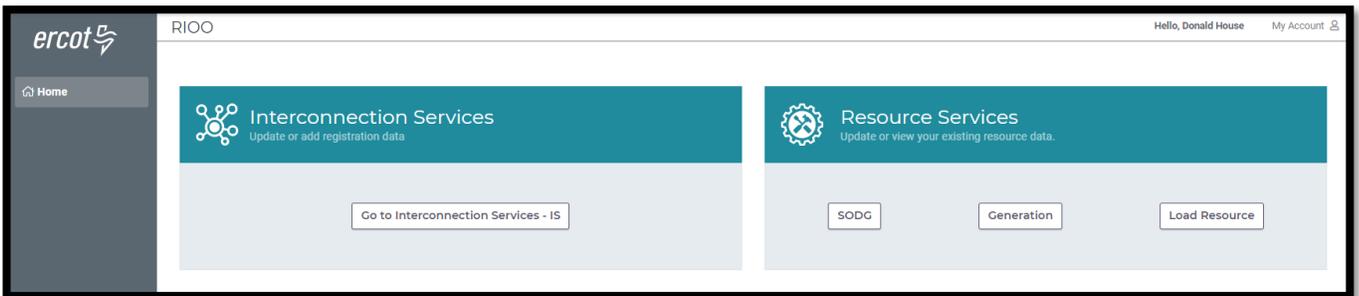
- You'll be prompted to enter a 6-digit code to complete the multi-factor authenticator (MFA). The MFA code will be sent to the app selected when setting up your account (Auth0 Guardian, Google Authenticator, SMS Text Authentication, or another authentication program that you chose to use).



- Select **Remember this browser** to avoid having to login multiple times:

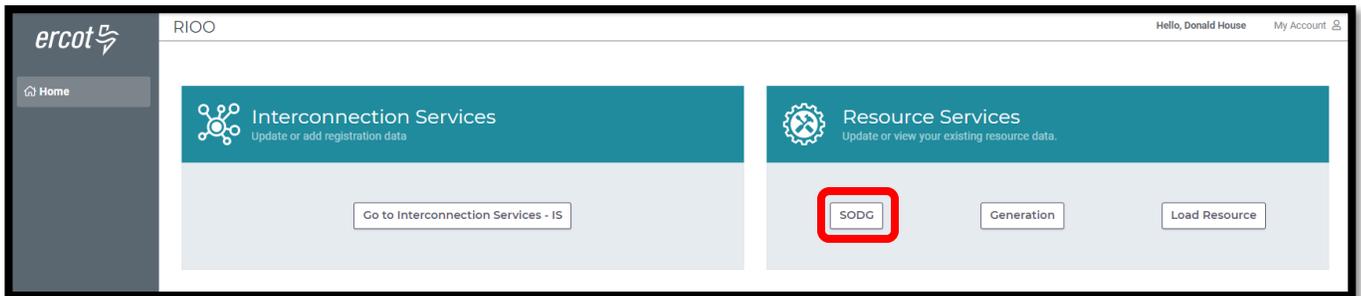


- After successfully logging in, you'll be taken to the RIOO home screen:



Overview of RIOO Resource Services

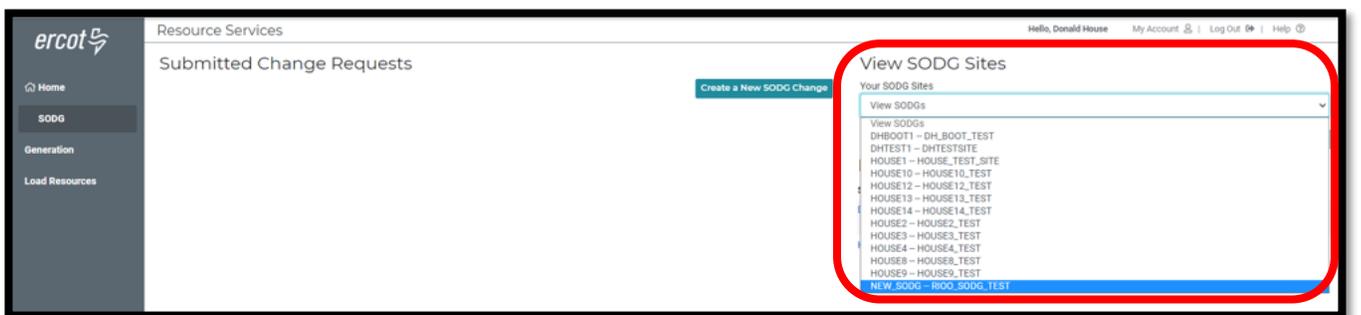
- On the RIOO home screen, open Resource Services by clicking on the **SODG** button
 - Resource Services is used to update an existing SODG
 - Interconnection Services is used to create a new SODG
 - See **RIOO User Guide – Creating a New SODG** for details



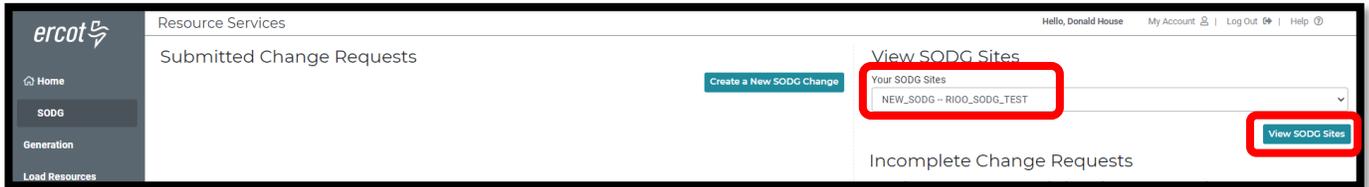
- The change request dashboard is displayed



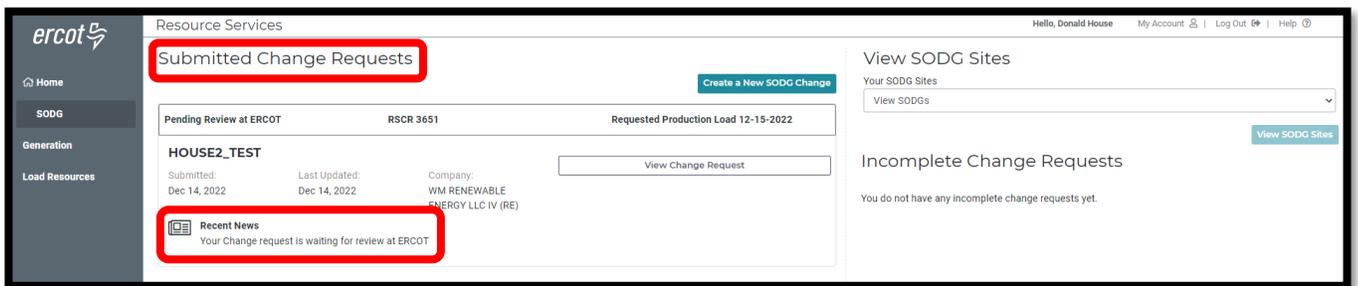
- The dashboard allows the user to view their existing SODGs and their current CRs
 - View all existing SODGs associated with the Resource Entities represented by the user in the dropdown list under **Your SODG Sites**
 - **Users are highly encouraged to verify their existing SODG data periodically, especially after a CR is processed and updated in the Network Model**



- If the user selects one of the SODGs, and then clicks on **View SODG sites**, the user can view all existing registration data for that SODG



- The user can view CRs that have been submitted but not yet added to the Network Model; the associated status is displayed in the **Recent News** text (more details on the status changes will be provided later in this guide)

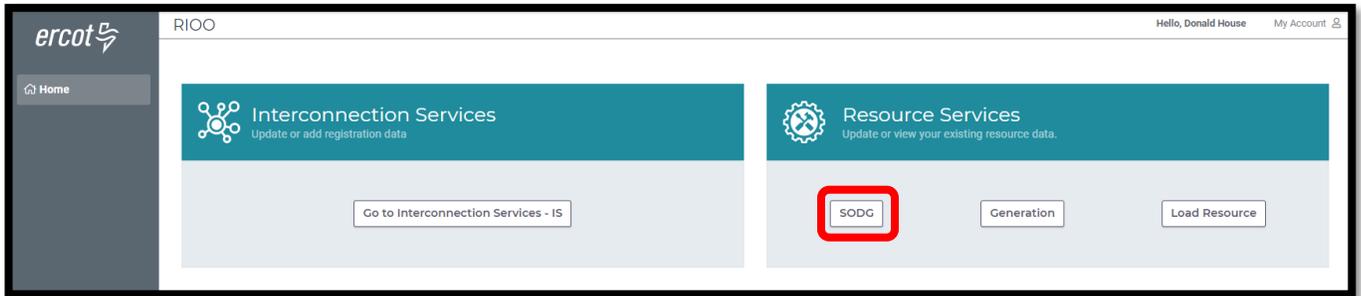


- The user can also view CRs that have been started but not yet submitted to ERCOT
 - The user can click on **Finish Change Request** to open and continue the CR



Starting change request for an existing SODG

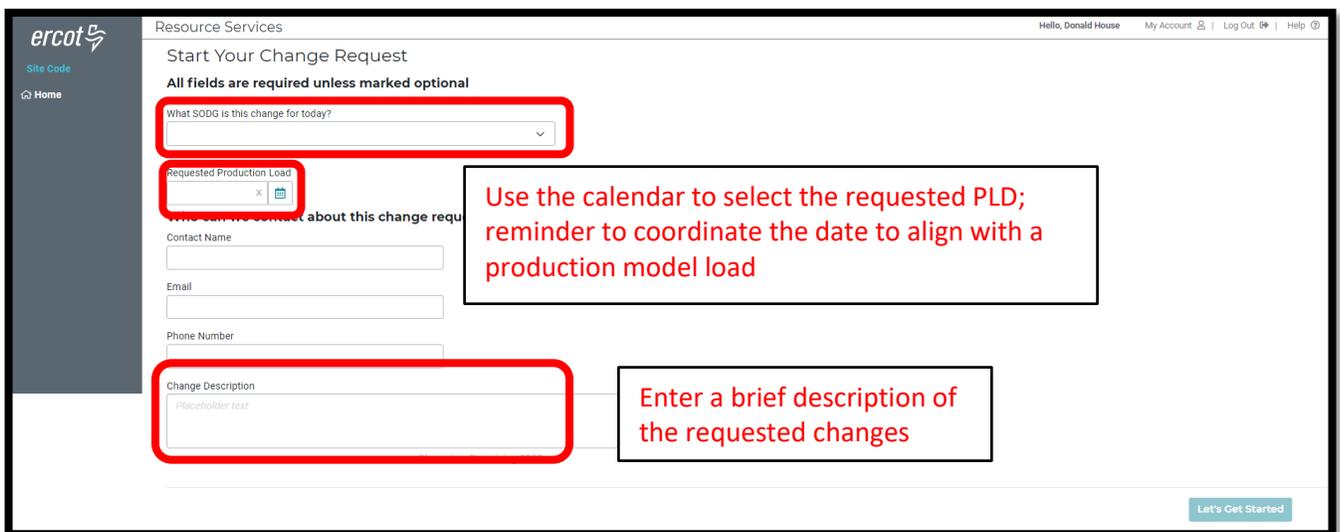
- On the RIOO home screen, open Resource Services by clicking on the **SODG** button



- On the change request dashboard, click on **Create a New SODG Change**



- Select which SODG to update from the **What SODG is this change for today?** drop-down list
 - Note that the user will see a list of all SODGs associated with the REs represented by the user that are currently in the ERCOT Network Model
- Enter the contact information and a brief description of the requested changes



- Sample completed Start Your Change Request panel

- On the SODG List screen, all data submission panels are listed along with a **View** panel to see all data at once
 - **Start** indicates that nothing has been updated on 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 user only needs to open the panels for which updates will be submitted
 - **This guide will provide one example of an update; there are too many possible scenarios to capture all of them or to determine which examples would be the most helpful**
 - The same data validation rules will be applied as they are when a new SODG is created
 - Any questions or issues with specific updates can be directed to the ERCOT Demand Integration team (ERCOTLRandSODG@ercot.com) for assistance
 - Progress can be saved, allowing the user to return to the application later to finish the submission

The screenshot displays the ERCOT Resource Services interface. The top navigation bar includes the ERCOT logo, the text "Resource Services", and user information: "Hello, Donald House", "My Account", "Log Out", and "Help". Below the navigation bar, there are tabs for "List", "View", "Site Details", "Metering - TDSP Information", "Unit", and "Mapping". The main content area is titled "Settlement Only Distribution Generator" and contains a table with a "View" button for each row. A red box highlights the "View" button in the top right corner of the table. Another red box highlights the "Site Code" "HOUSE2" in the left sidebar. A third red box highlights the "Continue" button at the bottom right of the page. A "Done or Check Progress" button is also visible next to the "Continue" button.

Note that the **Site Code** is displayed for the selected SODG

Click **View** to see the current details from all panels for this SODG

- Sample of View details for the selected SODG

The screenshot displays the 'View SODG' page in the ERCOT Resource Services application. The page is divided into four main sections: Site Details, Metering Details, Unit Details, and Mapping Details. Each section contains a table of key-value pairs representing the data for the selected SODG.

Site Details

Resource Entity Name	WM RENEWABLE ENERGY LLC-W (RE)
Resource DUNS Number	147449083100
Site Name	HOUSE2_TEST
Site Code	HOUSE2
Unit Name	SODG
Unit Code	HOUSE2_SODG
Address	
Street Address	1
City	Temple
State	TX
Zip	123456669
County	Bell
2003 Congestion Management Zone	South
Additional Site Information	
In-Service Date (Production Load Date)	11-17-2022
Stop Service Date	

Metering Details

Is your substation owned by a NOIE?	false
Is your generator behind a NOIE Settlement Meter Point?	false
How many Primary EPS meters do you have?	0
Who is the TDSP providing service to your site?	ACP TEXAS CENTRAL COMPANY (TDSP) (DUNS: 007924772)
Resource ID (RID)	NEW RID FOR UPDATE
Does your site have an ERCOT read meter?	false
ESI ID (Optional)	TEB112345

Unit Details

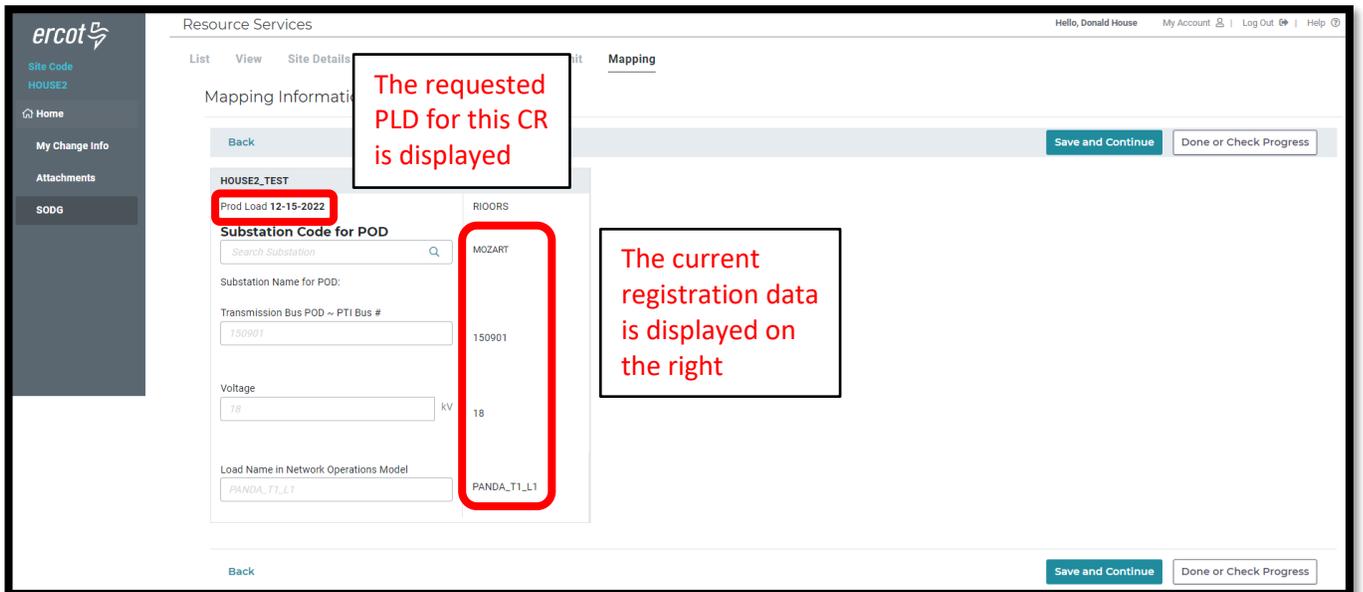
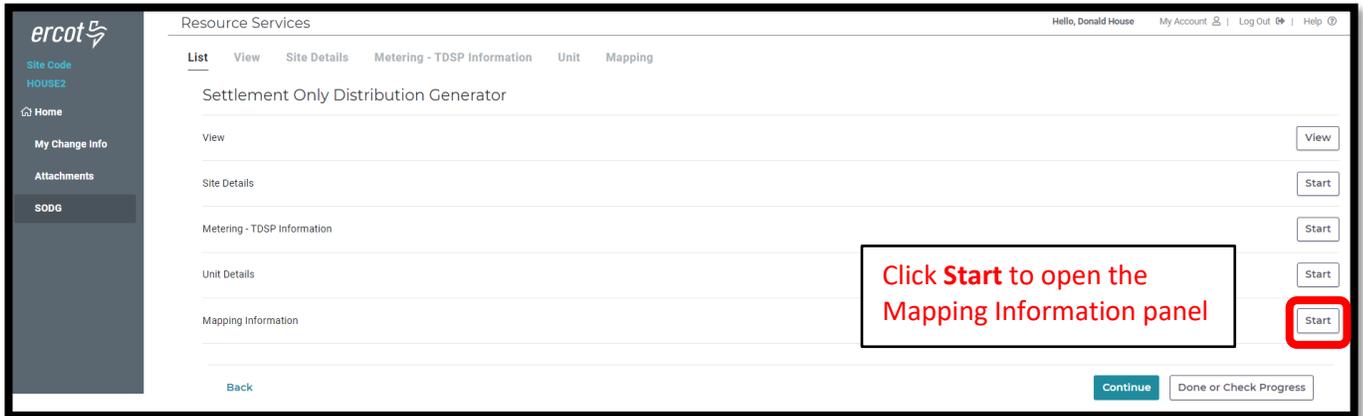
Unit Name	SODG
Technology Type	Hydro
Number of Turbines	
Physical Unit Type	Other
Name Plate Rating	
Name Plate Rating MW/MVA	1
Name Plate Rating MVA	2
Renewable	
Is your generator a renewable energy resource?	Yes
Is it a renewable credit generator (RN) or a renewable offset (RO)?	RN
Fuel Information	
Primary Fuel Type	Not Applicable
Secondary Fuel Type (Optional)	Not Applicable
Generic Information	
Generic Fuel Category	Single Cycle -- 98 MW
Generic Start-up / Operating Category	Renewable (Including Hydro)

Mapping Details

Substation Code for POD	MOZART
Transmission Bus POD -- PTI	150931
Bus #	
Voltage	18
Load Name in Network Operations Model	PANDA_T1_L1

Change Request example

- This example will update the Mapping Information
- Note that RIOO – RS doesn't currently require attachments to updates
 - However, if any of the data found on the TDSP Read Form is updated in the CR (Metering – TDSP Information or Mapping Information panels), the user must also coordinate with the TDSP to get an updated TDSP Read Form to attach to the submission; if the form isn't attached, ERCOT will send the CR back to the user to request the attachment.



Resource Services

Mapping Information

HOUSE2_TEST

Prod Load 12-15-2022

Substation Code for POD

Search Substation

Substation Name for POD:

Transmission Bus POD - PTI Bus #

109051

Voltage

138 kv

Load Name in Network Operations Model

PANDA_T1_L1

Back

Save and Continue Done or Check Progress

Updates to the PTI Bus # and Voltage are entered by the user

Click Save and Continue to return to the SODG List screen

Resource Services

Settlement Only Distribution Generator

View

Site Details

Metering - TDSP Information

Unit Details

Mapping Information

Back

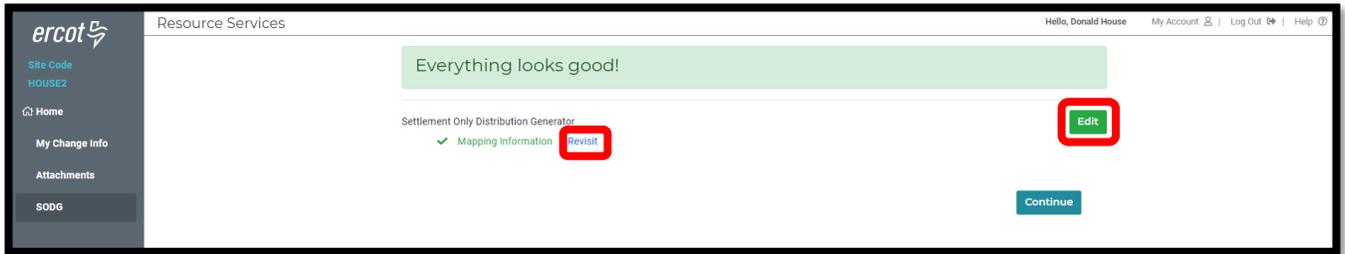
View Start Start Start Edit

Continue Done or Check Progress

Click Continue or Start for another panel to make more updates; Click Done or Check Progress to view the update dashboard

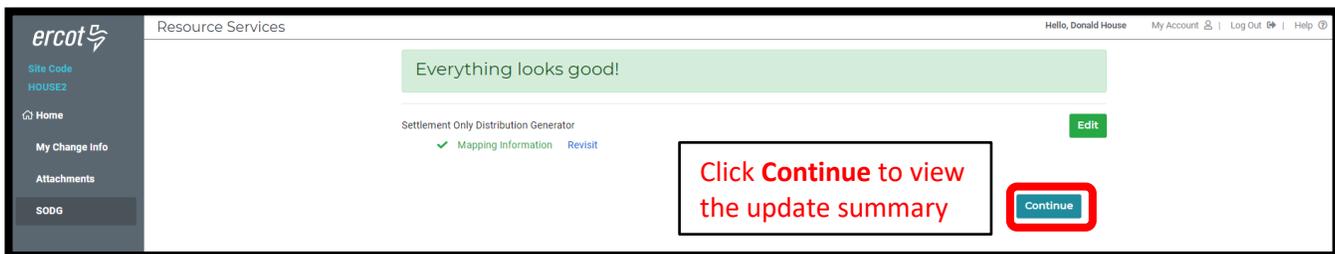
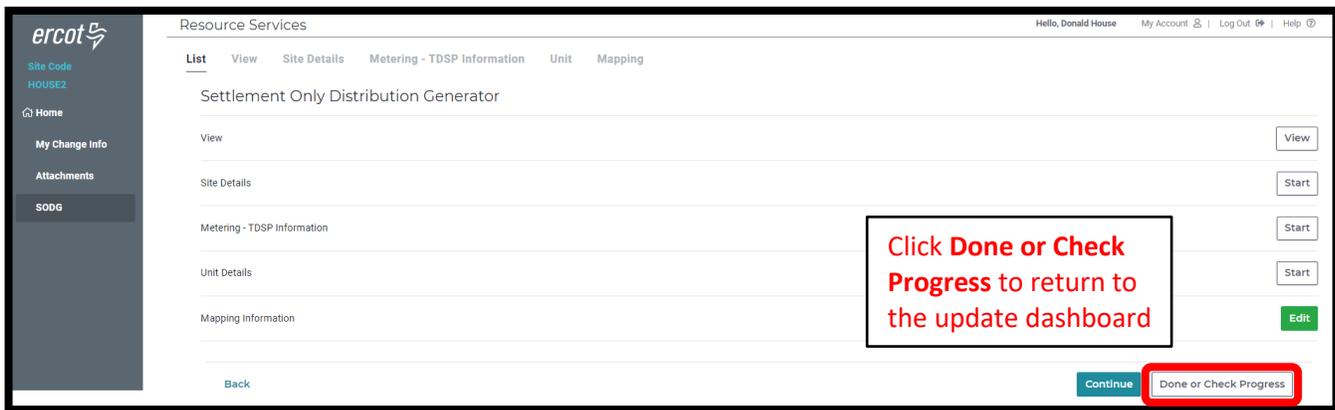
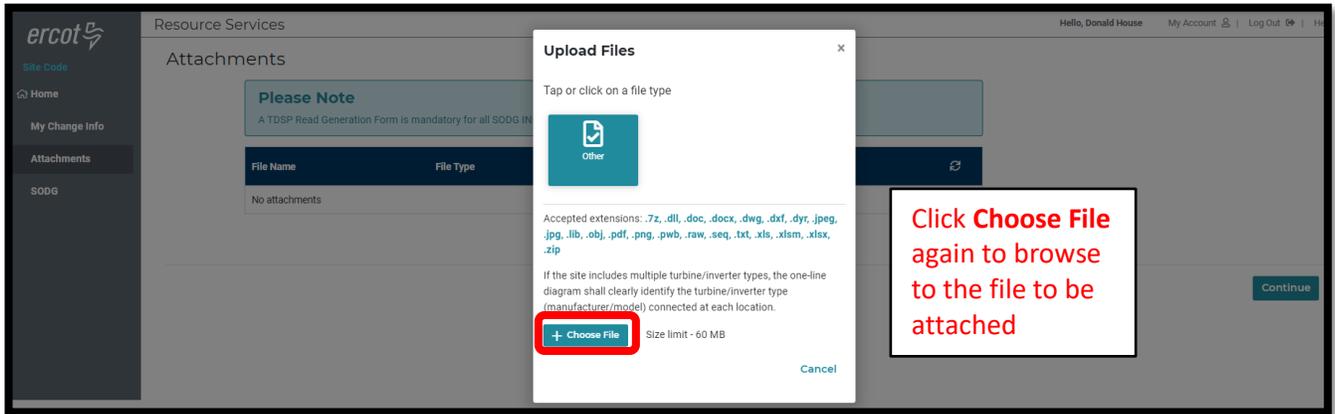
A green Edit button means that initial data validation is passed; no further edits are required on this panel

- On the update dashboard, all data submission panels that have been updated will be displayed
 - 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 updated panels pass initial validations, but the user has the option to go back to any panel to make revisions



- Because the updated data in this CR is also found on the TDSP Read Form, an updated form needs to be attached to this submission. If the form isn't attached, ERCOT will send the CR back to the user to request the attachment.





- The user has an option to click **Download SODG Data** to download an excel file containing the existing information on each panel
 - Note that this download does not show before and after data; it is intended to be a record of all existing data for this SODG before the CR is submitted

Resource Services

Hello, Donald House My Account Log Out Help

RSCR 3651 Requested Load Date Settlement Only Generator
STANDARD 12-15-2022 HOUSE2_TEST

[Download SODG Data](#) [Submit to ERCOT](#)

My Change Info

[Go Back To Section](#)

Requested Production Load Date	12-15-2022	
Contact Name	Donald House	
Email	fake@email.com	
Phone Number	555-867-5309	
Description of your Change Request	Testing SODG updates	

Mapping Information

[Go Back to Section](#)

	Before	After
Transmission Bus POD – PTI Bus #	150901	109051
Voltage	18	138

Site Details

[Go Back to Section](#)

	Before	After

Is there anything else we need to know about this change?

Characters Remaining 1000

Resource Services

Hello, Donald House My Account Log Out Help

Your change request has been submitted to ERCOT.
Click [here](#) to return to your dashboard.

RSCR 3651 Requested Load Date Settlement Only Generator
STANDARD 12-15-2022 HOUSE2_TEST

[Withdraw Change Request](#) [Download SODG Data](#)

My Change Info

[Go Back To Section](#)

Requested Production Load Date	12-15-2022	
Contact Name	Donald House	
Email	fake@email.com	
Phone Number	555-867-5309	
Description of your Change Request	Testing SODG updates	

Mapping Information

[Go Back to Section](#)

	Before	After
Transmission Bus POD – PTI Bus #	150901	109051
Voltage	18	138

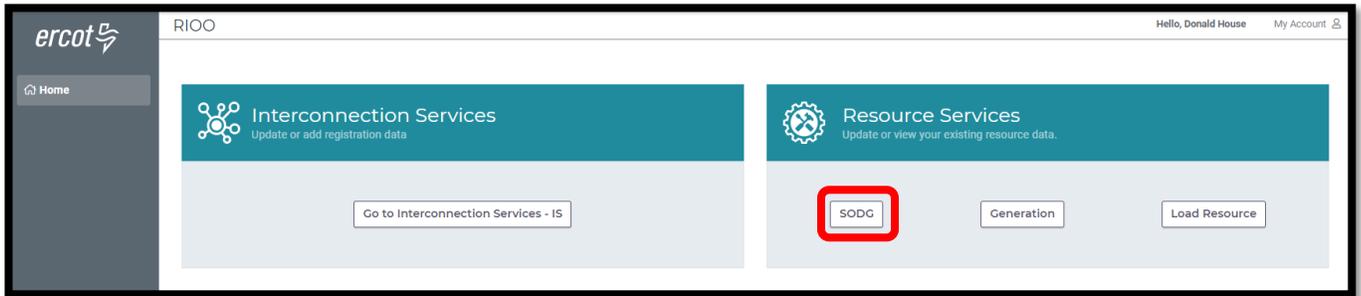
Site Details

[Go Back to Section](#)

	Before	After

Is there anything else we need to know about this change?

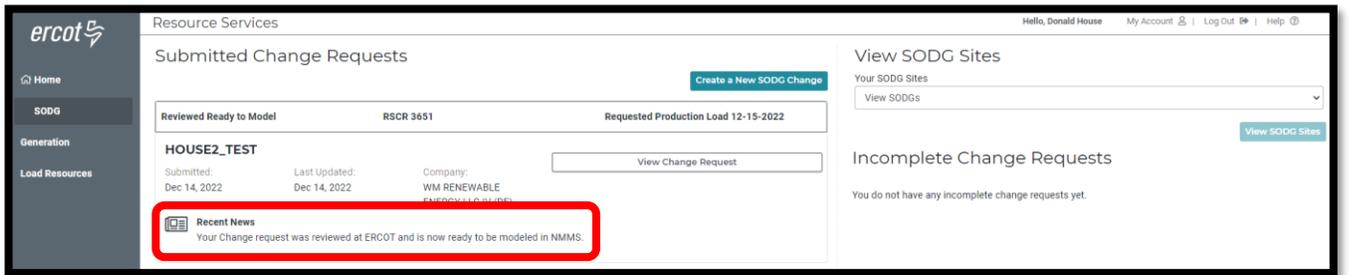
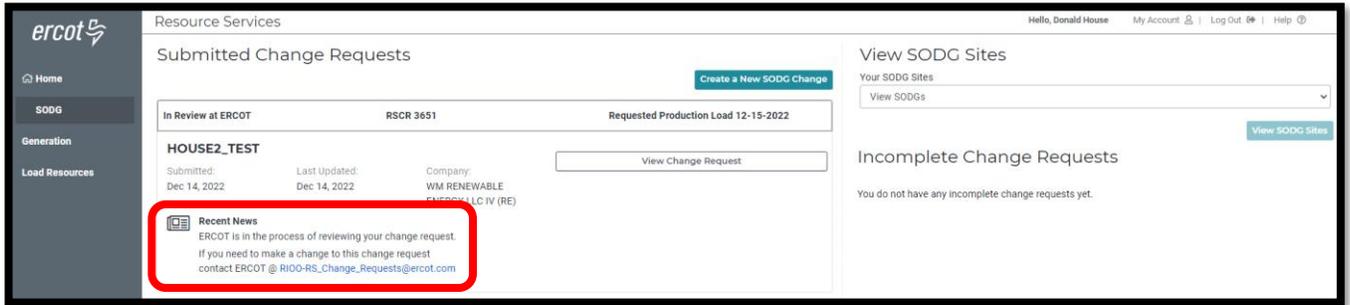
- Back on the RIOO home screen, open Resource Services again by clicking on the **SODG** button



- The change request dashboard is displayed, and the submitted CR is listed (note that under **Recent News**, the status of the CR is **waiting for review at ERCOT**)
- As the CR is processed by ERCOT, the Recent News display is updated to let the user know the status



- Examples of other status updates for this CR
 - The final status of **modeled in NMMS** (network model management system) signifies that ECOT has verified the change took effect as requested on the PLD
 - The CR will no longer appear on this display after it has been modeled
 - The changes can be verified by viewing the SODG Site data again



Stopping an existing SODG

- To stop an existing SODG, only the **Stop Service Date** on the Site Details panel needs to be updated
 - The **Stop Service Date** needs to be a PLD coordinated with the ERCOT Demand Integration team (ERCOTLRandSODG@ercot.com)
 - The rest of the CR process is the same as the example above, except there is no need to attach a TDSP Read Form when stopping an SODG
 - **NOTE: Once the Stop Service Date is populated in the CR, the user cannot edit any other information in the data panels**
 - **After the CR is submitted, no other CRs can be created for this SODG**
 - If a mistake is noticed before the PLD, the RE can contact ERCOT Demand Integration to request for the CR to be canceled

The screenshot shows the 'Site Details' form for SODG HOUSE2_TEST. The form is divided into several sections:

- Basic Information:** Includes fields for Resource Entity Name (WM RENEWABLE ENERGY LLC IV (RE)), Resource DUNS Number (147449083100), Site Name (HOUSE2_TEST), Site Code (HOUSE2), and Unit Name (SODG).
- Address:** Includes fields for Street Address, City (Temple), State, Zip (72345669), County, and 2003 Congestion Management Zone.
- Additional Site Information:** Includes 'In Service Date (Production Load Date)' and 'Stop Service Date' (highlighted with a red box).

A red callout box points to the 'Stop Service Date' field with the text: "Use the calendar to select the requested Stop Service Date (PLD); reminder to coordinate the date to align with a production model load".

After submitting Change Request

Change Request status

In addition to the Recent News updates on the CR dashboard, the CR 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 CR.

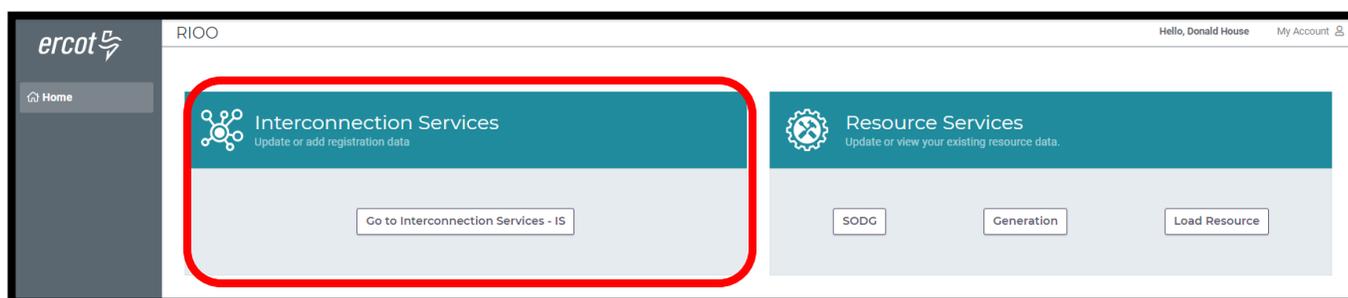
- Status updates for a submitted CR include:
 - Pending Review
 - In Review
 - Ready for Modeling
 - Modeled

Confirming updated SODG in production Network Model

After the PLD for the CR, the submitter is encouraged to verify that the updates are visible in the SODG Site data in RIOO-RS. ERCOT will verify that the SODG changes are in the production Network Model, but it is the responsibility of the RE/QSE to notify ERCOT if they notice any settlements issues related to the SODG CR.

Creating a new SODG

To create a new SODG, the RE must use the RIOO Interconnection Services application (RIOO – IS), which is accessed using the same RIOO user account. Refer to the **RIOO User Guide – Creating a New SODG** on the [Distributed Generation webpage](#) for details.



Reporting issues

As ERCOT continues to develop the RIOO application, any functionality issues or suggestions for improvements can be sent via email to RIOO-Help@ercot.com. Any significant updates to the application will be communicated through market notices.