

## Contents

About this guide .....	2
1. Sign-up .....	3
2. Sign-In .....	7
2.1 Landing Page and DER records	7
2.2 Personalization settings	8
3. Create and Submit DER data .....	10
3.1 Create by Data entry in the portal	10
3.2 Create by File Upload (Import)	12
3.3 Submit DER data	16
Submit DER data – individual form	16
Submit DER data – multiple records	17
4. View and Update DER data .....	18
4.1 View DER data within the portal	18
4.2 View DER data by File Export	20
4.3 View or Download SLDs	21
4.4 Update DER data record	21
5. Things to remember .....	22
5.1 Supported browsers	22
5.2 Sign-up considerations	22
5.3 Save DER Static Data record	22
5.4 SLD File upload and download	22
5.5 Submit DER Static Data record	22
5.6 File Import	22
5.7 Notifications	23
5.8 Select record not blue text	23
5.9 Sign-up turnaround	23
5.10 Portal Availability	23
Appendix .....	24
A. Abbreviations .....	24
B. Template for file upload .....	24
C. AESO contact .....	24
D. Sign-Up or Sign-In URL Portal URL .....	24
E. Email notifications .....	24

## About this guide

The 'AESO Enterprise Data Portal' is a suite of the AESO online portals meant to provide a unified platform for a secure single point of data & document exchange with the AESO's external stakeholders. The 'Distributed Energy Resources (DER) Data Portal' is part of that suite, meant for exchange of static data related to Micro-Generation (MG) type DERs. The Distribution Facility Owners (DFOs) representatives will use this portal to send the 'DER (MG) Static Data' to the AESO. Please **note** that currently only Micro-Generation (MG) type DER data can be provided through the portal.

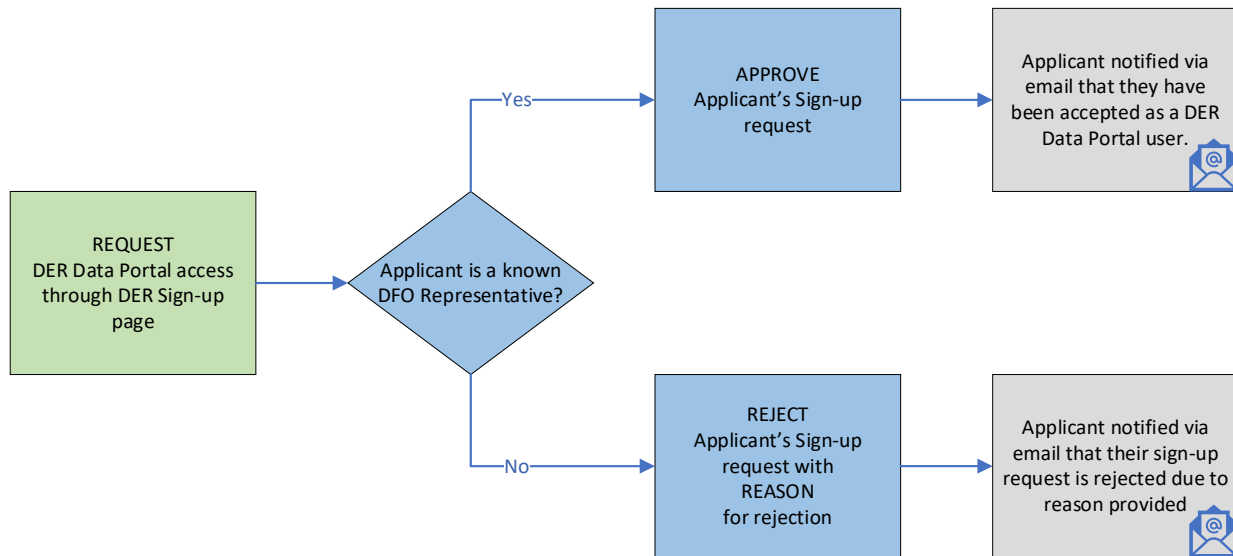
This guide is for users of the 'DER Data Portal'. In this document, 'DER (MG) Static Data' would be referred as 'DER data' and the 'DER Data Portal' will be referred to as 'Portal' only. Also, note that dummy data and users have been used to create the screenshots.

This will guide the users on how to:

- **Sign-Up**, to be a portal user
- **Sign-In**, as a portal user to enter or view DER (MG) static data
- **Create DER data record** by
  - Data entry in the portal
  - File upload
- **Submit DER data record** by
  - Individual form submission
  - Multiple records submission
- **View or Update DER data**
  - View and Download DER data
  - Update DER data
- **Things to remember**

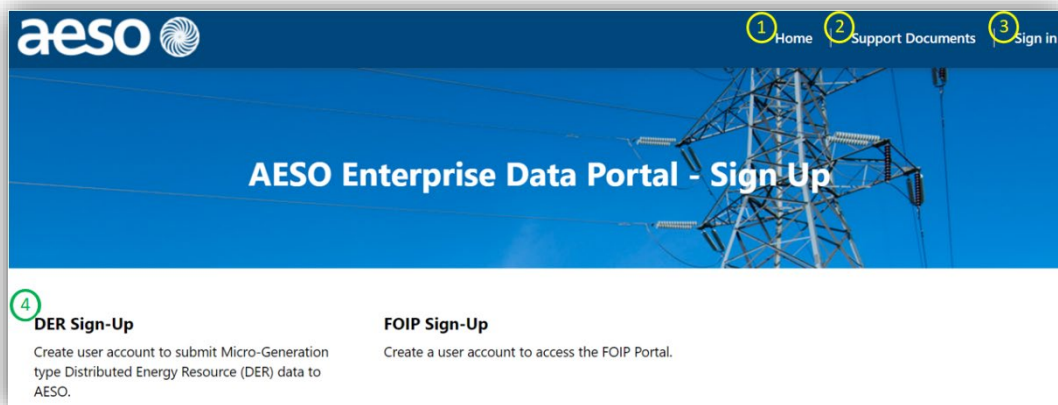
# 1. Sign-up

The DFOs representatives will need to request the AESO for portal access via sign-up process. The ‘DER Admins’ on the AESO’s side will verify the user and approve them to use the Portal.



Steps to sign-up for the prospective DFO users of the portal:

1. Go to the ‘AESO Enterprise Data Portal’ homepage, as below, using the URL provided in Appendix.



Where,

- 1- Homepage – as shown above
- 2- Support Documents – contains documents like user guides, templates etc. to help you access and navigate within the portal for data exchange.
- 3- Sign In – brings up the Sign In page
- 4- DER Sign-Up – link to the sign-up form for DER Data Portal

2. Click on the DER Sign-Up link. An empty DER Data Portal Sign-Up form will open:

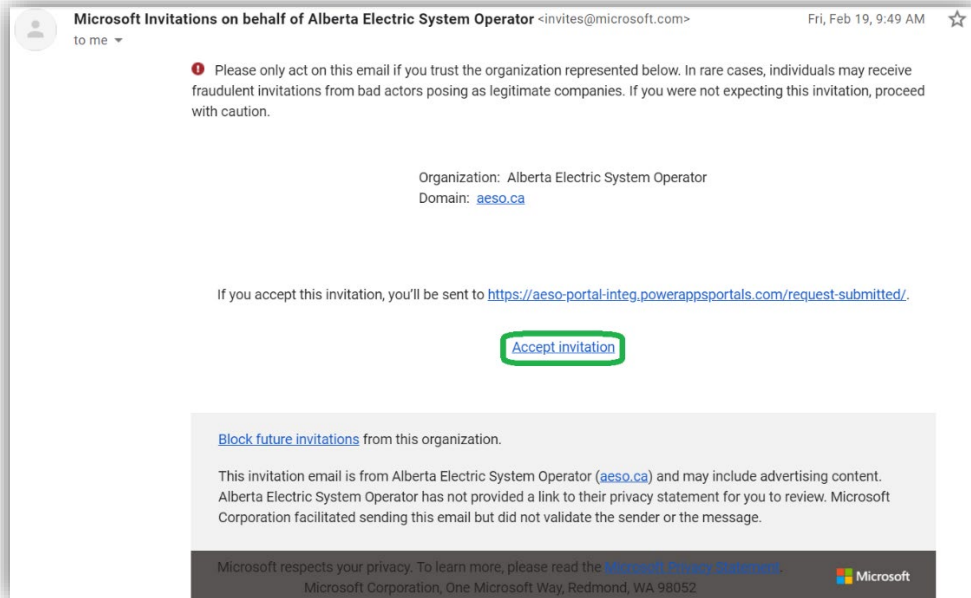
3. Complete the Sign-up form click 'Submit' button at the bottom of the page.

**Note:**

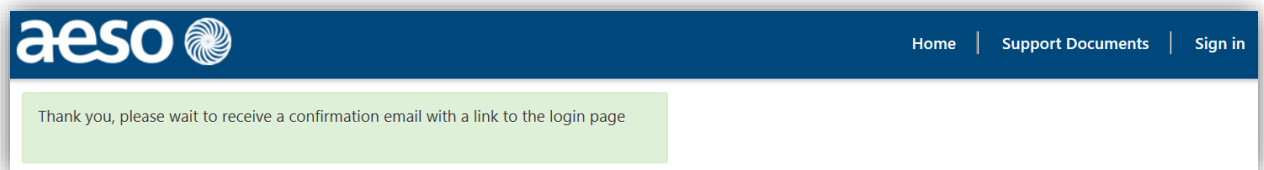
- If you use Office365, please use your cloud credentials in the email field. If you are unsure about what these are, please check with your IT support team to verify the correct credentials to use.
  - For security reasons, you must sign-up with your individual email. If more than one-member sign-up for a DFO then all will be able to see the records for that DFO irrespective of who created it but only the creator of the record will be notified on record update.
  - It is recommended that there should be at least two users from each DFO to be able to fill in for other's absences
4. The sign-up request is sent to the AESO's DER Admin and a submission successful message will be displayed on the page with details of what to expect next, as shown, below.

5. If the access is 'Approved' by the AESO's DER admin, then,

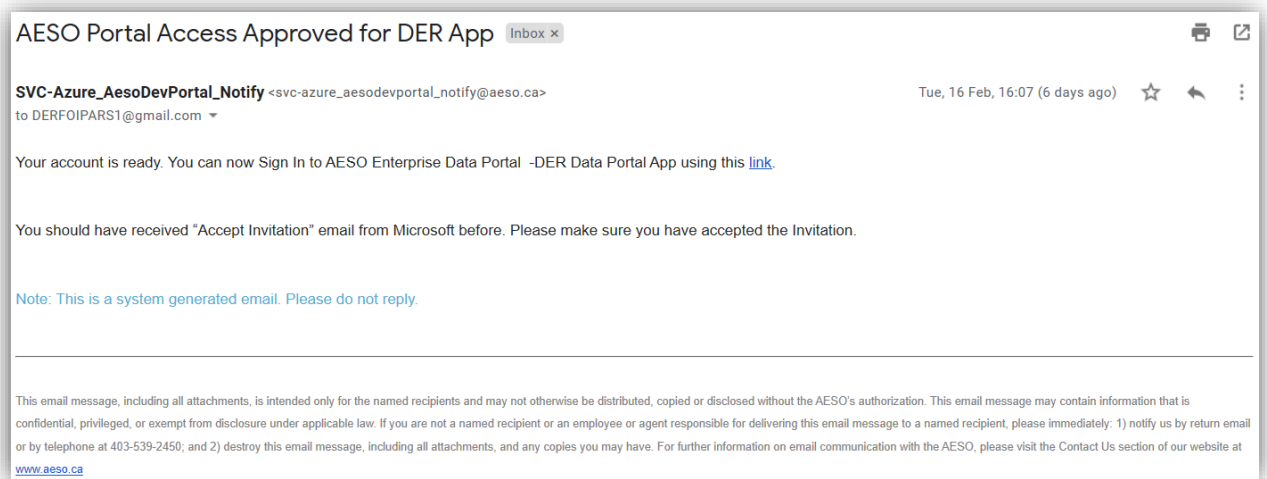
5.1. The applicant will receive a Microsoft Invitation email, on behalf of the AESO to be included in the AESO's Azure Active Directory. The applicant must 'Accept Invitation'.



5.2. 'Accept Invitation' will display another page to wait for another confirmation email.



5.3. The applicant will then be a DER Data portal user and will receive a confirmation email with link to the Sign In page. The confirmation email will look like this:



6. If the access is 'Rejected' by the AESO's DER admin, then, the applicant will receive an email with reason for rejection.

## 2. Sign-In

After receiving the confirmation email the user can Sign-In to the portal using the link provided in the email or to go to the portal using the URL provided in Appendix.

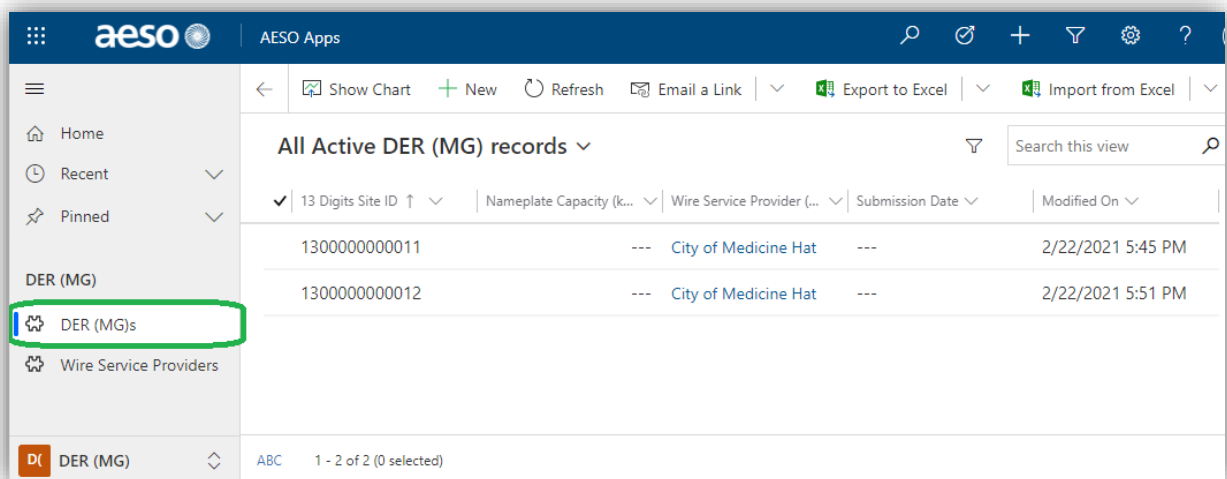
### 2.1 Landing Page and DER records

On Sign-In, user will see this Landing page:

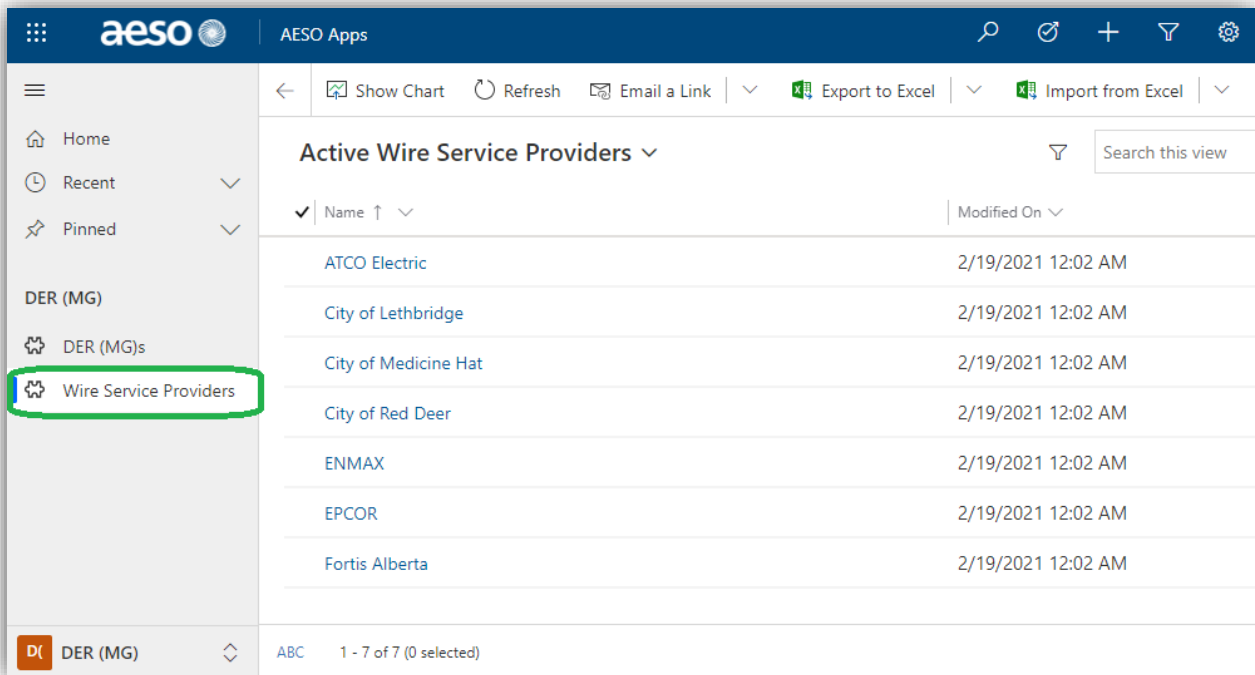


Clicking on 'AESO Apps' box will take user to the Summary page for the 'DER (MG)' records.

There will be no records on the summary page initially. The list will grow as DER data is entered in the portal. More details on how to view the records are provided in the 'View or Update DER Data' section.



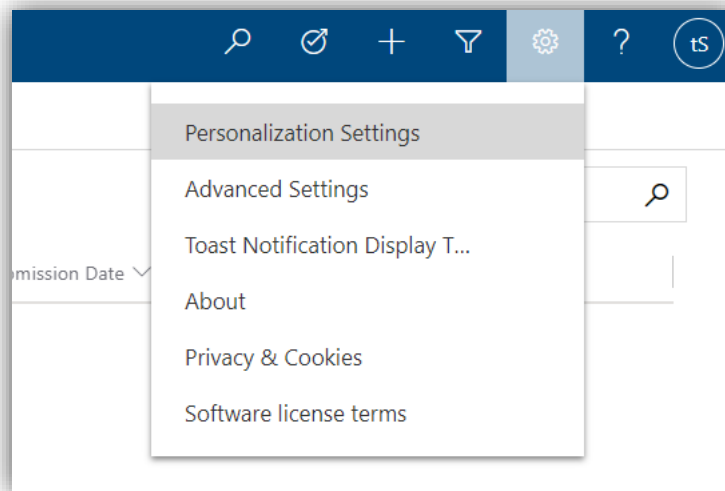
The other entity 'Wire Service Provider' only shows the list of DFOs.



## 2.2 Personalization settings

By default, the time zone in 'DER data portal' is set to GMT/ UTC (Coordinated Universal Time). This can create confusion for a DFO user as all the DFOs and the DERs in Alberta operate in Mountain time. It is therefore recommended that users change the time zone for their DER Data Portal login to Mountain time.

To change the time zone, go to 'Personalization settings' on the blue ribbon at the top.

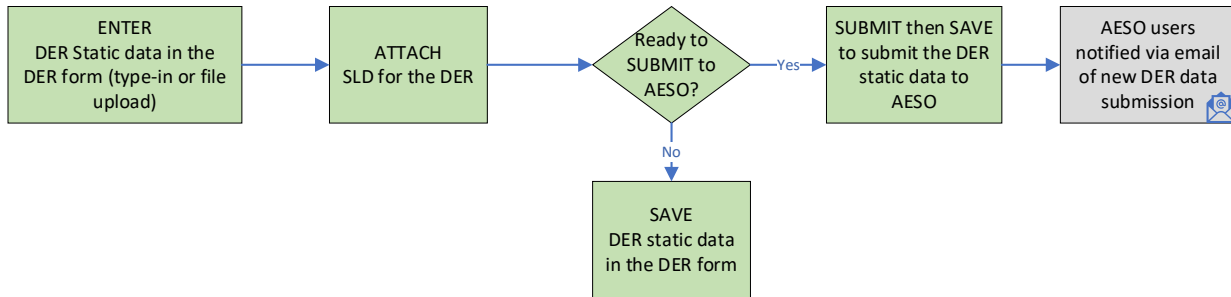




A new pop-up window with all the editable user specific settings will open. The user shall change the Time Zone to Mountain Time (US & Canada) and press OK. This will show the time in mountain time for that user.

### 3. Create and Submit DER data

The DER static data must be entered in the DER (MG) Form and submitted to the AESO. It can be entered in the form manually or by File upload (Import) using an excel file template. Only one DER's static data can be entered at a time, using the Manual Data Entry method, whereas multiple DERs static data can be uploaded to the portal using File upload method.



#### 3.1 Create by Data entry in the portal

User can enter the DER(MG) resource data manually using the DER data form in the portal that will create a DER record. Only one DER record can be created at a time using the Manual Data Entry method.

Steps to perform enter the DER data manually:

1. Sign-In to the DER portal as described in the Sign-In section above.
2. Open a NEW record by clicking the '+ New' button on top ribbon. An empty, new DER static data form will open.

The screenshot shows the 'New DER (MG)' form with the following fields and values:

- Project Description: ---
- 13 Digits Site ID: \* ---
- Wire Service Provider: \* ---
- Site Legal Description: \* ---
- Is it an Energy Storage unit?: \* No
- Is Aggregated Site?: \* No
- Energy Source: \* ---
- Type of Generator: \* ---
- Is generator CSA Anti-islanding Standard C22.2 107.1 compliant?: \* ---
- Actual in-service date: \* ---
- Interconnection Line: \* ---
- Substation Number: \* ---
- Meter Type: \* ---
- Retailer ID: \* ---
- Metering Data Management (MDM): \* ---
- Load Settlement Agent (LSA): \* ---

3. Enter the static data in the form.

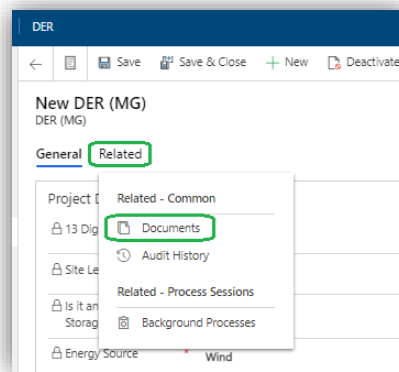
User can enter partial data and save the form to return and complete the form later, however, user must fill these 7 fields to be able to save a DER Data record. These fields are marked with a red Asterisk (\*) on the form.

- I. 13-Digits Site ID
- II. Site Legal Description
- III. Wire Service Provider (WSP)
- IV. Energy Source
- V. Interconnection Line
- VI. Substation Number
- VII. Nameplate Capacity

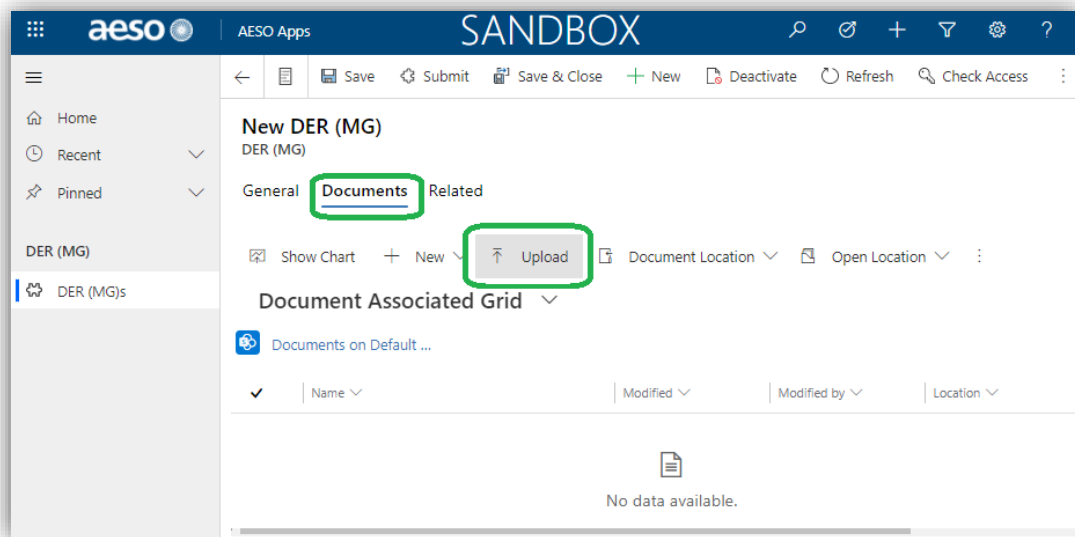
There are other fields marked with a blue 'Plus' (+) on the form, which are mandatory for submitting the record.

4. Upload SLD/ SLDs for the DER (required for large Micro-generators only).

Click 'Related' tab to open dropdown and select 'Documents'.

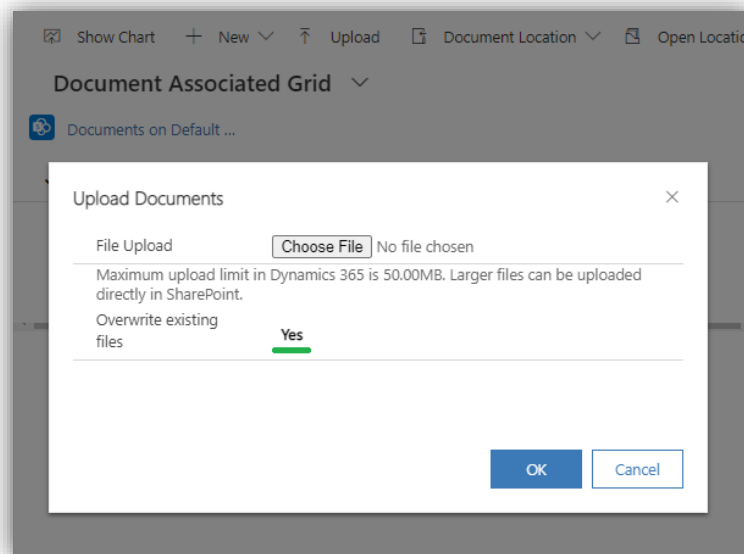


'Documents' tab will open with feature to 'Upload' a document.

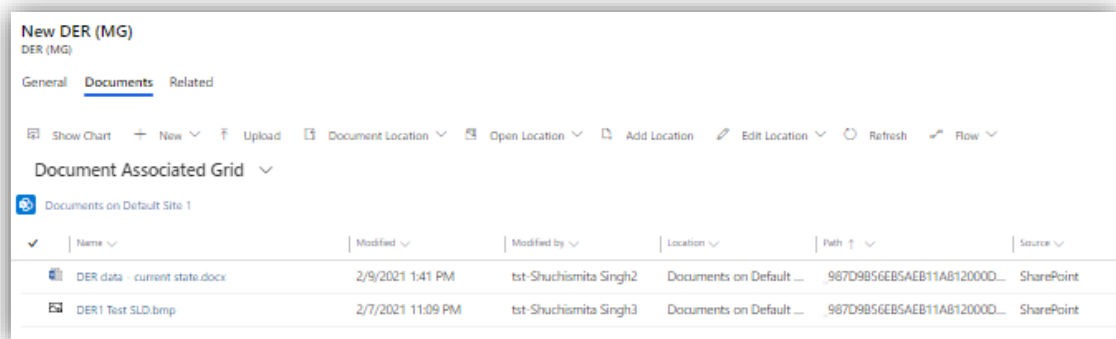


Use 'Upload' button to choose file for uploading the SLD document. The 'Overwrite existing files' feature is set to 'Yes' by default, which means the file will be overwritten by the new document if their file name and type is same. The old file will become an older version of the document, which will only be visible to system administrator of the portal at the AESO. If user changes the 'Overwrite existing files' to 'No', then another file will be uploaded with the same file name.

**Note:** A file cannot be deleted once uploaded. In case, user uploads a wrong file erroneously, they can overwrite it with the correct file. If a user must delete a file from the portal, then they will need to contact the AESO where the system administrator will delete it on their behalf.



After upload, the uploaded file will be shown under the 'Documents' tab.



### 3.2 Create by File Upload (Import)

DER(MG) static data for one or multiple DERs can be uploaded to the DER data portal by Importing an Excel data file. File Import will only create the DER(MG) static data records, it cannot be used for any existing record.

The Excel file template for the import option is included in the Appendix.

Steps to perform File Import:

1. Enter the data in the template to create the file for Import.
2. Sign-in to the DER portal as shown in Section 2.
3. Import the data file created using the template. The template is provided in the Appendix.

13 Digits Site ID	Nameplate Capacity (KW) AC/DC	Wire Service Provider (WSP)	Metering Point Identifier (MPID)	Submission Date	Modified On
0200000000001	4,999.99	Fortis Alberta	12	1/28/2021	2/24/2021 3:48 PM
1000000000003	---	ATCO Electric	---	---	1/20/2021 5:13 PM
1000000000004	---	ATCO Electric	---	---	1/19/2021 11:53 PM
1000000000005	220.00	ATCO Electric	---	---	2/17/2021 5:46 PM

Choose the Import file and click 'Next'.

Click 'Finish Import' to complete the import and create the respective DER data records in the portal.

**Note:** Do not change any Import settings when importing the data File.

Import from Excel

*i* You're about to import test upload.xlsx 16 KB

Import Settings

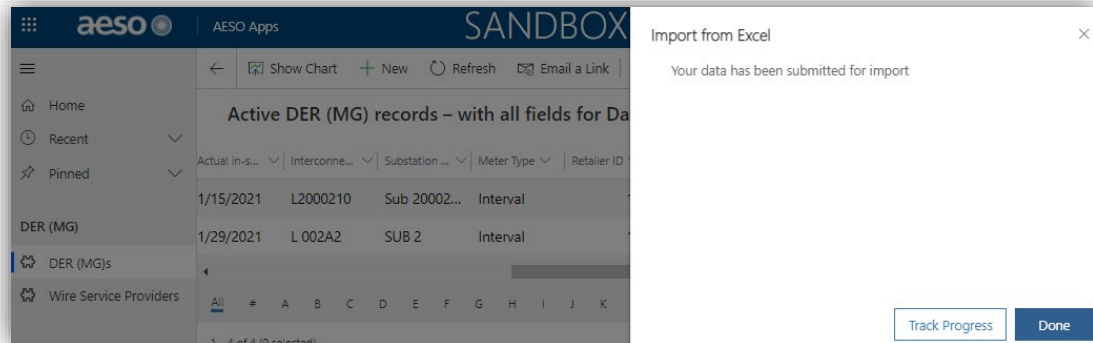
Alternate Key  
Select An Alternate Key

Duplicate Data Settings

Allow Duplicates  No

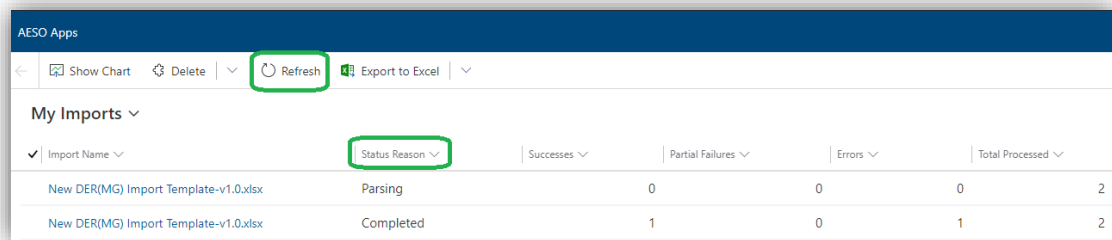
Back Review Mapping **Finish Import**

On the next screen click 'Track Progress' to track the progress of processing the imported records or, alternatively, simply click 'Done'.



On selecting 'Track Progress', the progress status of the upload can be viewed by refreshing the web page frequently. Double click on the records shows the details of an import. The data import shall be complete in half a minute but can take few minutes sometimes.

**Note:** *The progress of file import will not be viewable if user clicks 'Done'.*



Details of failure to import a record can be viewed under the 'Failure' tab.

**test upload .xlsx**  
Import Source File

General **Failures** Success Partial Failure Related

Name	test upload .xlsx	Status	Completed
Created By	Shuchismita Singh		
Created On	3/9/2021  11:50 PM	Finished On	3/10/2021

Properties

File	test upload .xlsx	Size	21456
Record Type	aeso_der	Map	---
Records Owned By	Shuchismita Singh	Duplicate Detection	Yes

Results

Successes	3	Failures	0
Partial Failures	0	Total	3

- View the newly created DER data records, for each DER, on the portal summary page. Double click on the empty spaces in the record to view the details of the record i.e. DER's Static Data.

All Active DER (MG) records Search this view

13 Digits Site ID	Nameplate Capacity (kW)	Wire Service Provider (W...)	Metering Point Identifier...	Submission Date	Modified On
9999999999903	540.00	ATCO Electric	---	---	3/10/2021 12:00 AM
9999999999901	4,999.99	ENMAX	---	---	3/10/2021 12:00 AM
9999999999992	1.00	ENMAX	---	---	3/10/2021 12:00 AM
2000000000030	1.00	Fortis Alberta	---	---	3/9/2021 12:05 PM

- Save the form if prompted to do so.

- Upload SLD/ SLDs for each DER (for large Micro-generators only) record that was created by File Import.  
Open each DER records one by one and follow the same SLD File upload steps as mentioned in Manual Data Entry method (Section 3.1).

### 3.3 Submit DER data

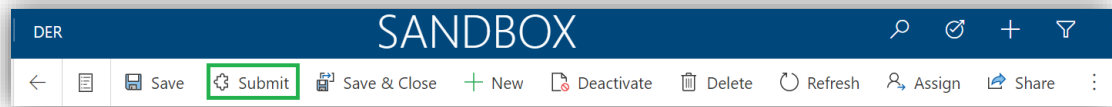
After creating and completing a DER data record in the DER Portal, the DFO user must SUBMIT the data to the AESO. It can be done in two ways:

- Submit one DER data record individually
- Submit multiple DER data records in bulk

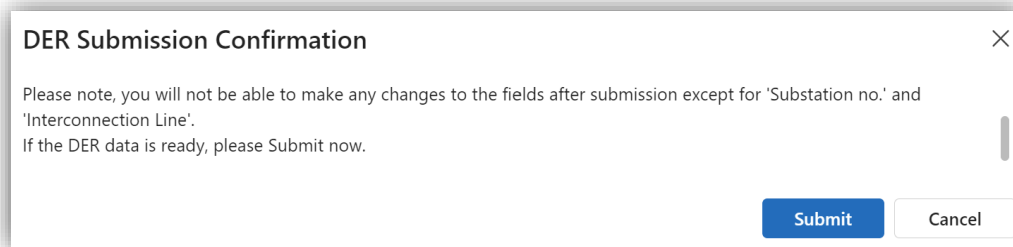
The user must fill all the mandatory fields before submitting it to the AESO. The user shall also make sure that all the data is correct because after submission they will not be able to update the data except 'Interconnection Line' and 'Substation Number'. In case a user needs to update any other field, they will need to contact the AESO, and the DER data portal admin will make the change on their behalf. The AESO's DER Admin contact is provided at the end of this document.

#### Submit DER data – individual form

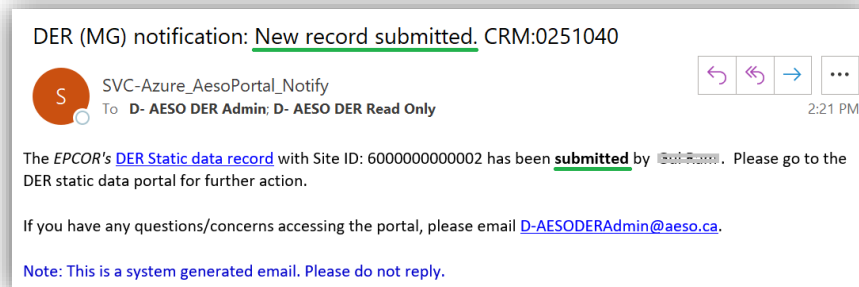
- Open the DER record and click SUBMIT button at top of the DER data form.



A confirmation pop-up will confirm the submit action; select SUBMIT.



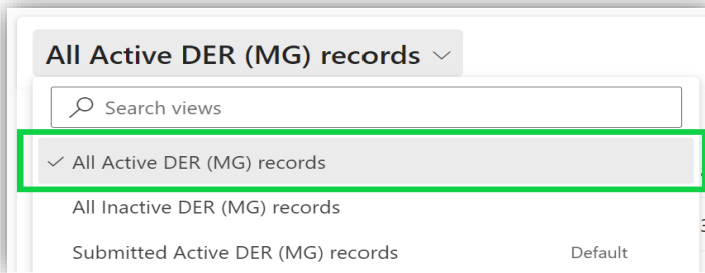
- A notification email is sent to the AESO users when a new DER data record is submitted by any DFO.



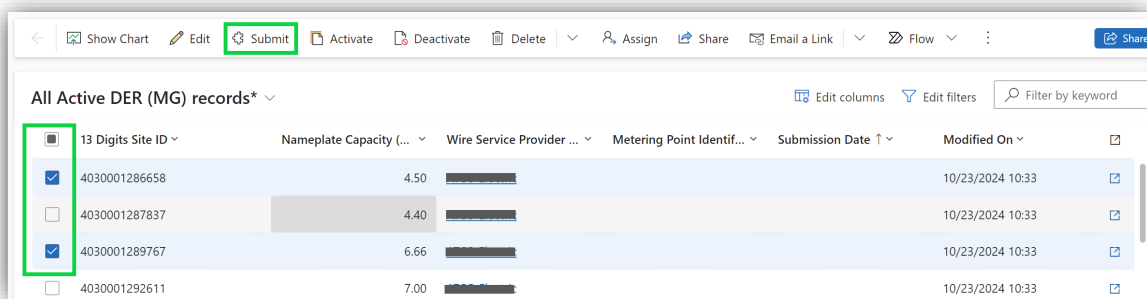


### Submit DER data – multiple records

1. Open the 'All Active DER (MG) records' view to see all the unsubmitted records.

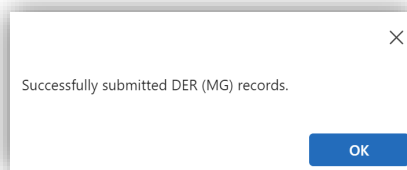


2. Select all the DER records that to be submitted and click SUBMIT at top of the page.

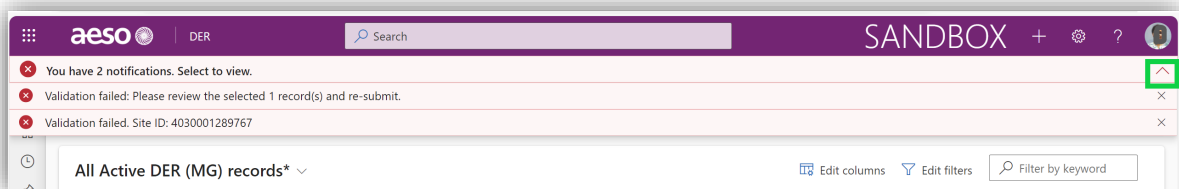


Same as individual record submission, a confirmation pop-up will confirm the submit action; select SUBMIT.

3. The SUBMIT action runs data validation on the selected records and submit those which have been successfully validated, while holding back the ones which fail the data validation. Same as individual record submission, an email notification is sent to the AESO users.
4. A pop-up for successful submission of any record will show as below:



5. If the data validation for any DER record is unsuccessful then a notification will appear at the top which can be expanded to view the details.

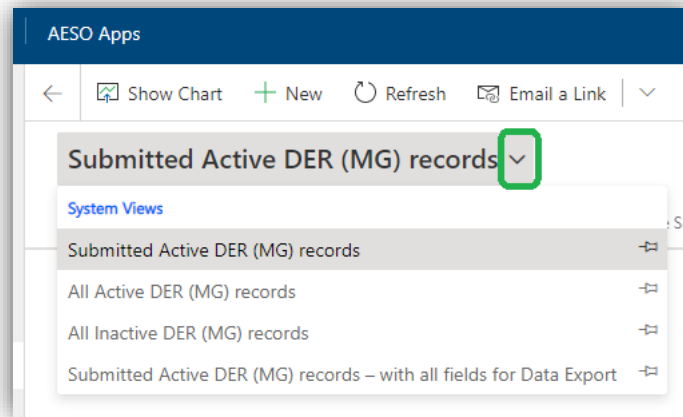


## 4. View and Update DER data

### 4.1 View DER data within the portal

The DFO users, can only view the DER data that was entered by them. They can view the data at any time using multiple views within the portal.

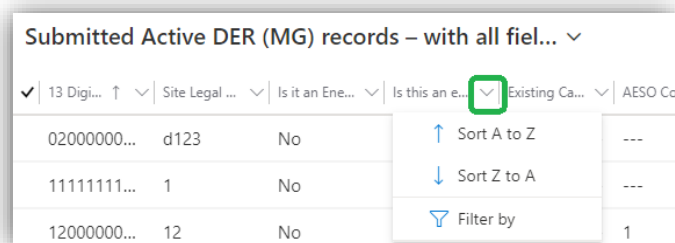
On the summary page, use the down arrow, as shown below, to select the view.



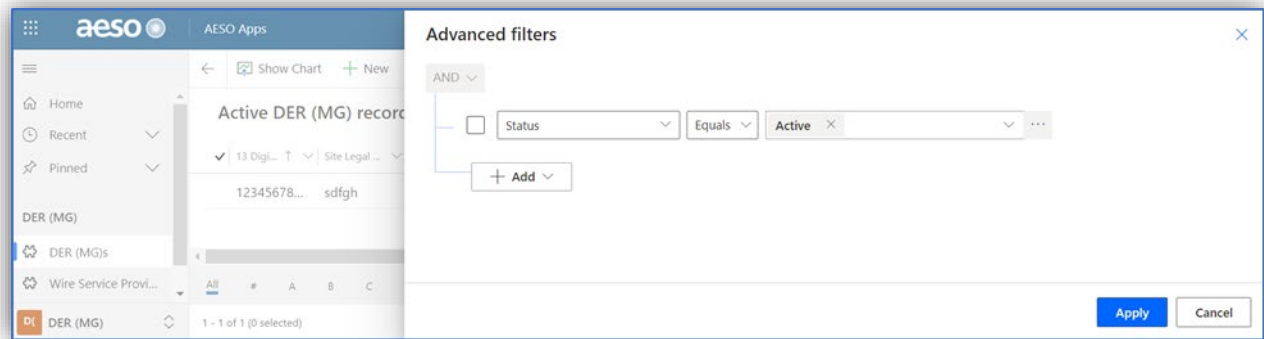
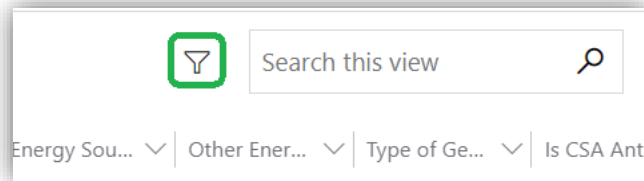
- **‘Submitted Active DER (MG) records’:** Only shows the DER Data records that are submitted to the AESO.
- **‘All Active DER (MG) records’:** Shows all the DER Data records (submitted and not submitted to the AESO).
- **‘All Inactive DER (MG) records’:** Shows all the DER Data records (submitted and not-submitted to the AESO) that were deactivated by any user.
- **‘Submitted Active DER (MG) records – with all fields for Data Export’:** Shows the DER Data records that have been submitted to the AESO. The records have all the data fields of a DER data record that are entered by the DFOs, except for the SLDs. This view should be used to export the DER data for further use.

**Note:** SLDs need to be opened/ downloaded separately from each DER data record for viewing. User can access the SLD from the ‘Documents’ section in the ‘Related’ tab.

Each view can be further sorted or filtered as needed by using the down (v) sign beside the field/ column names.



The view can be further modified, if needed, using Advanced filter i.e. funnel symbol next to Search View.

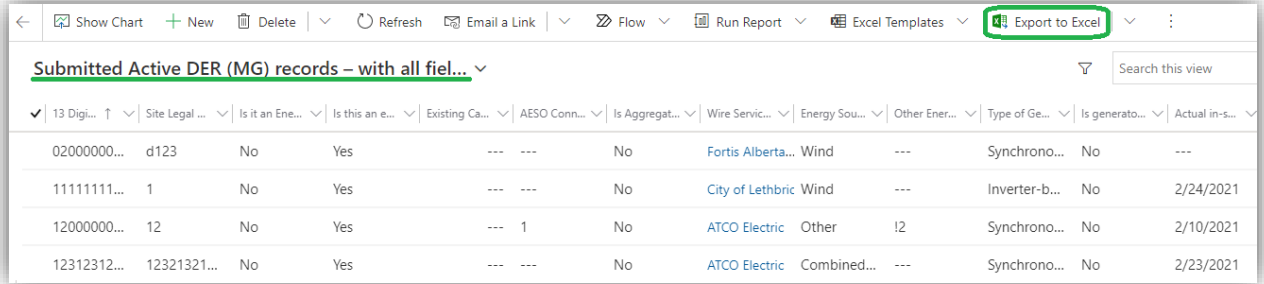


#### 4.2 View DER data by File Export

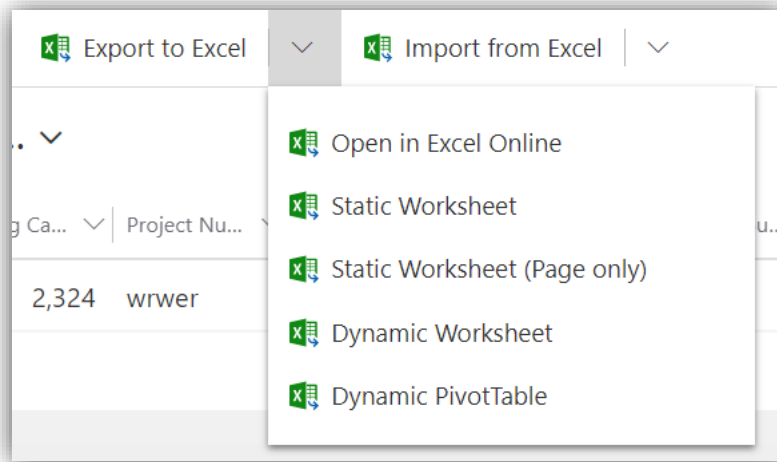
Users can export static data for one or multiple DERs in an excel file.

Steps to export the DER static data:

1. Go to the 'Submitted Active DER (MG) records – with all fields for Data Export' view
2. Modify the view if needed using sort & filter options
3. Click 'Export to Excel' button



4. The downloaded Excel file will be available in the 'Downloads' folder.
5. User can refine their export using some other options within 'Export to Excel'



**Note:** The associated SLDs cannot be exported to an excel file hence, if needed, they should be downloaded separately from each DER data record's 'Documents' section under the 'Related' tab.

### 4.3 View or Download SLDs

SLDs can be viewed within the portal or downloaded from the 'Documents' section of the DER data record.

#### To view SLD:

Open the DER data record > Related tab > Documents > Double click the SLD to be viewed from the list of associated SLDs > the SLD will open in another tab.

#### To download SLD:

Open the DER data record > Related tab > Documents > Select the SLD > Check Out > the SLD will be downloaded in the 'Downloads' folder.

### 4.4 Update DER data record

The DFO users can update any data for a DER before it is submitted to the AESO.

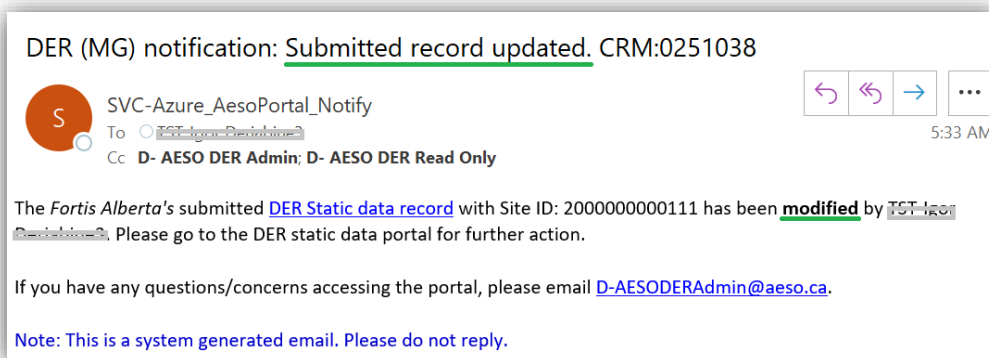
After submission of a DER data, the DFO users can only update following data fields:

- Substation Number
- Interconnection Line
- Any document attachments to the DER data record e.g. SLDs

After submission of the DER data, if the DFO users wish to update any field other than the ones mentioned above then they will need to contact the AESO to make the required changes on their behalf.



Updates made to any DER data field triggers an email notification for the AESO users and the users of the concerned DFO to notify the change.



## 5. Things to remember

### 5.1 Supported browsers

The AESO Enterprise Data Portal is supported and tested on Google Chrome browser, hence Google Chrome is the recommended browser for using the portal.

### 5.2 Sign-up considerations

If you use Office365, please use your cloud credentials in the email field. If you are unsure about what these are, please check with your IT support team to verify the correct credentials to use.

For security reasons, you must sign-up with your individual email. If more than one-member sign-up for a DFO then all will be able to see the records for that DFO irrespective of who created it but only the creator of the record will be notified on record update.

It is recommended that there should be at least two users from each DFO to be able to fill in for other's absences.

### 5.3 Save DER Static Data record

When entering data manually in the form, a DFO user can enter partial data and save the form to return and complete the form later. However, to be able to save the DER static data record they must fill the following 7 fields. A list of mandatory and optional fields is provided in the Appendix.

- I. 13-Digits Site ID
- II. Site Legal Description
- III. Wire Service Provider (WSP)
- IV. Energy Source
- V. Interconnection Line
- VI. Substation Number
- VII. Nameplate Capacity

### 5.4 SLD File upload and download

An uploaded SLD (or any file) cannot be deleted. In case, a wrong file is uploaded erroneously, it can be overwritten with the correct file. If the uploaded file must be deleted from documents tab section, then DFO user will need to contact the AESO where the system administrator will delete the file for DFO.

SLDs or any attached document cannot be exported to an excel file hence, they should be downloaded separately from each DER data record for viewing.

### 5.5 Submit DER Static Data record

After DER static data submission, a DFO user cannot update the data except 'Interconnection Line' and 'Substation Number'. It is important to make sure that all the data is correct before submitting it to the AESO. In case any data, other than the 'Interconnection Line' and 'Substation Number' needs to be changed, then DFO user will need to contact the AESO where the system administrator will delete the file for DFO.

### 5.6 File Import

DER static data record cannot be updated by File Upload. To update the record, the DFO user must open the record in the portal and change it manually.

The DFO user shall not change any Import settings when importing the data File.

### 5.7 Notifications

The email notifications will be system generated, hence the DFO users shall not reply to the emails. In case of any queries, they can write to the email ID provided in the notifications.

The DFO users will need to ensure that the system generated emails are not marked as spam to receive timely notifications. The sender ID for system generated emails is provided in the Appendix.

### 5.8 Select record not blue text

To open a record, do not click on any blue text within the record. The Blue text in the portal is a link to that entity and clicking that will open information on that specific entity not the record. To open a record, user must avoid the blue text, instead double click the black text or empty space in the record. E.g. in the screen shot below click on the area covered by green box to view DER data details. Clicking on the red box will open WSP entity details.

13 Digits Site ID	Nameplate Capacity (kW) AC/DC	Wire Service Provider (WSP)	Meter ID
0200000000001	4,999.99	Fortis Alberta	12
1111111111110	1.00	City of Lethbridge	---
1200000000000	540.00	ATCO Electric	---

### 5.9 Sign-up turnaround

Sign-up turnaround time is dependent on the AESO’s DER data portal admin’s approval. It can take up to 2 days if the request is received on a weekend.

### 5.10 Portal Availability

The DER Data portal should be accessible by the user 24x7, 365 days. However, the support will be available only during normal business hours.

In case of unavailability of the Portal, the user can contact the AESO contact provided in the appendix and the AESO IT will try to assist asap. In cases that the unavailability is caused by Microsoft outages, the user will need to wait for the service restoration by Microsoft. The AESO will try to notify users through public announcement on its website ([www.aeso.ca](http://www.aeso.ca)), as soon as it becomes aware of the outage.

## Appendix

### A. Abbreviations

- AESO – Alberta Electric System Operator
- DER – Distributed Energy Resource
- DFO – Distribution Facility Owner
- MG – Micro-Generation
- MST – Mountain Standard Time
- SLD – Single Line Diagram
- WSP – Wire Service Provider

### B. Template for file upload

Please use the [DER\(MG\) Static Data Import Template](#) to create multiple DER(MG) static data records at once using file import process.

### C. AESO contact

Users can contact [D-AESODERAdmin@aeso.ca](mailto:D-AESODERAdmin@aeso.ca) for any questions about this user guide, or support needed in using the portal.

### D. Sign-Up or Sign-In URL Portal URL

- After go-live - <https://aeso-portal.powerappsportals.com/>

### E. Email notifications

To receive timely notifications, the DFO users shall take care that the emails from following sender is not marked as spam.

- [svc-azure\\_aesportal\\_notify@aeso.ca](mailto:svc-azure_aesportal_notify@aeso.ca).