



PJM Market Settlements Reporting System (MSRS) User Guide

Market Settlements Development

Date

For Public Use

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1 PJM MSRS User Guide

Welcome to the PJM Market Settlements Reporting System (MSRS) User Guide.

Intended Audience

This user guide is for Market Participants who need to use MSRS to:

- Retrieve and validate PJM weekly and monthly billing invoices
- Retrieve supporting MSRS reports for specific business areas

About This User Guide

MSRS allows you to view recent billing activity and invoices as well as download official billing invoices and other supporting MSRS reports.

After reading this guide, you will understand how to:

- 1 | View recent billing activity, details for PJM billing invoices and month-to-date billing, and download MSRS reports.
- 2 | Access and download MSRS report files without a web browser.

Additional supporting documentation is available at the end of this guide.

Interfacing With MSRS

You can interact with MSRS two ways:

- **Through a web browser:** MSRS is available as an interactive tool on pjm.com. Section 2 of this guide shows how to use this tool.
- **Without a web browser:** MSRS report files can also be accessed and downloaded through a URL-based browserless API or through PJM's Command Line Interface (CLI). Section 3 of this guide describes how to interact with the browserless URL. More information about PJM's CLI can be found on pjm.com under Markets & Operations > PJM Tools > System Requirements.

Note: The MSRS tool supports Google Chrome.

Access to MSRS

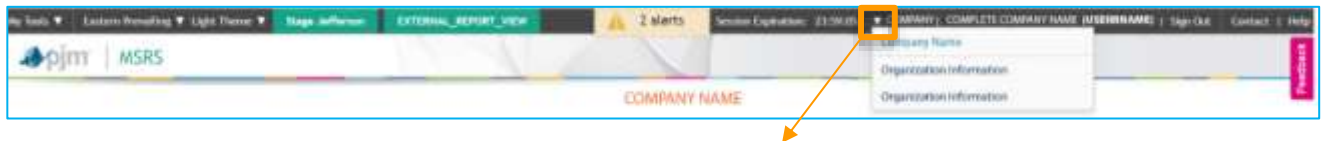
To access MSRS, you must have a valid PJM Tools user account and have MSRS read-only privileges assigned to that account. These privileges can be granted by your Company Account Manager (CAM).

Access MSRS from the [PJM Tools homepage](#) or directly at <https://msrsapp.pjm.com>.

Note: Production accounts differ from Train (sandbox) test accounts for PJM Tools. If you do not have either type of account, work with your CAM to provision the accounts or follow the **New User Registration** steps in the [PJM Account Manager User Guide](#).

SUMA Access

If you have SUMA access, you will be automatically logged into MSRS using the primary account associated with the SUMA account. To update and display other organizations that the account has access to, select the drop-down highlighted below and choose your desired account.



Browserless users should refer to Section 3 of this guide for SUMA functionality while using MSRS without a web browser.

2 Using the Browser-Based MSRS Tool

MSRS is an internet-based application that lets you view recent PJM market billing activity and official PJM invoices, as well as retrieve official invoice files and supporting MSRS report files.

In this section you will learn how to:

- Log in to the MSRS user interface
- Navigate the **Recent Billing** tab
- Navigate the **Billing Details** tab
- Navigate the **Reports** tab to download MSRS report files
- Navigate the **Download List** tab to download MSRS report files

MSRS User Interface Access

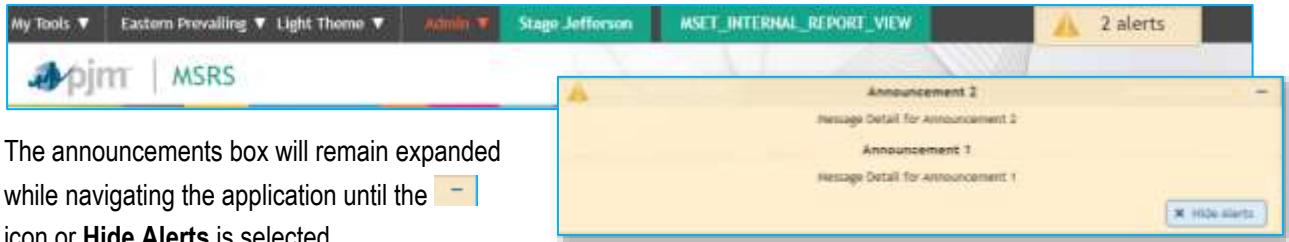
Log in to the MSRS application through the PJM Single Sign ON (SSO) screen.

After validating through SSO, MSRS will open on the **Recent Billing** tab if there are no active messages.



If there are any messages, scroll down and select **Continue** to proceed to the **Recent Billing** tab.

If there are any alerts or announcements, these will appear when a user has logged in. Select **Hide Alerts** to collapse the announcements or click the icon to see the message details.



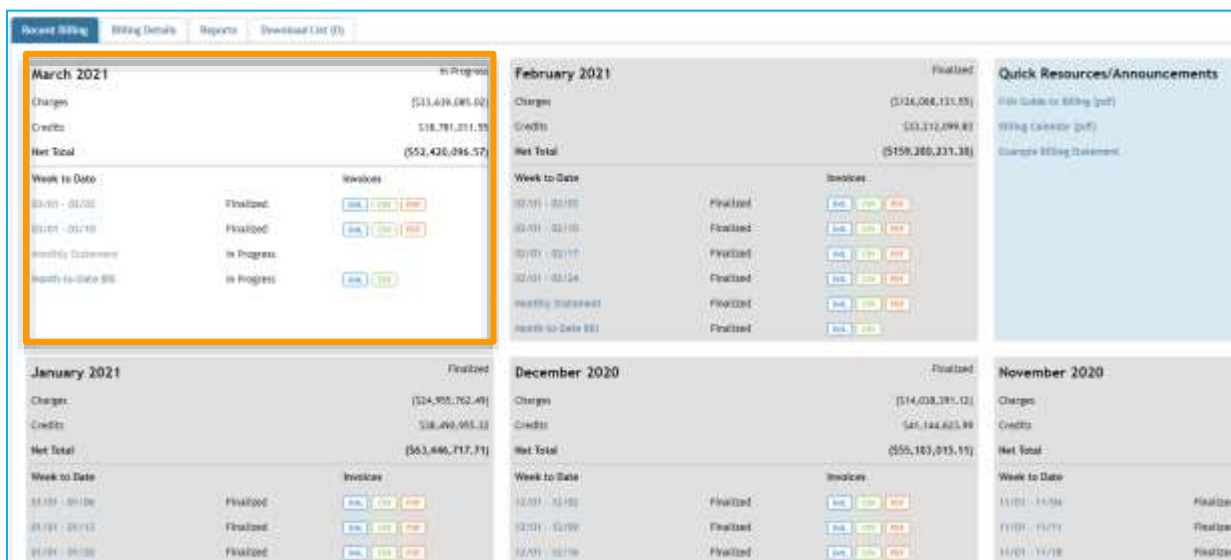
The announcements box will remain expanded while navigating the application until the icon or **Hide Alerts** is selected.



2.1 Recent Billing Tab

The **Recent Billing** tab shows information from the five most recent billing cycles. A billing cycle represents the defined time period covered in a weekly or monthly bill.

The current monthly billing cycle will be highlighted and displayed first on the page. There you can access week-to-date, month-to-date and monthly statement information, as well as see the current status of each bill.



Depending on when the application is accessed, some links in an active month will be inactive because that information is not yet available. Additionally, week-to-date information will not be listed and will only be made available once that time frame becomes active.

Week to Date

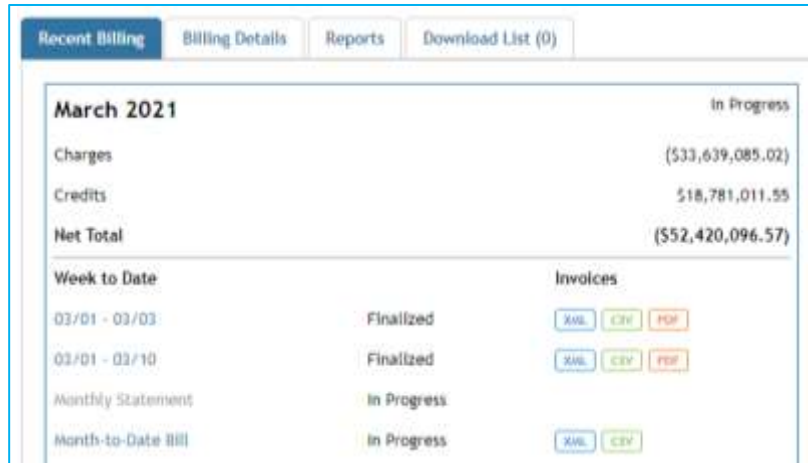
When you select any of the active links under the *Week to Date* header, you will be taken to the **Billing Details** tab (so long as the bills are in progress or have been finalized). Once there, data will be displayed for the selected billing month and billing period. You can also download week-to-date billing information as XML, CSV or PDF files by clicking the icons under the *Invoices* column.

Monthly Statement

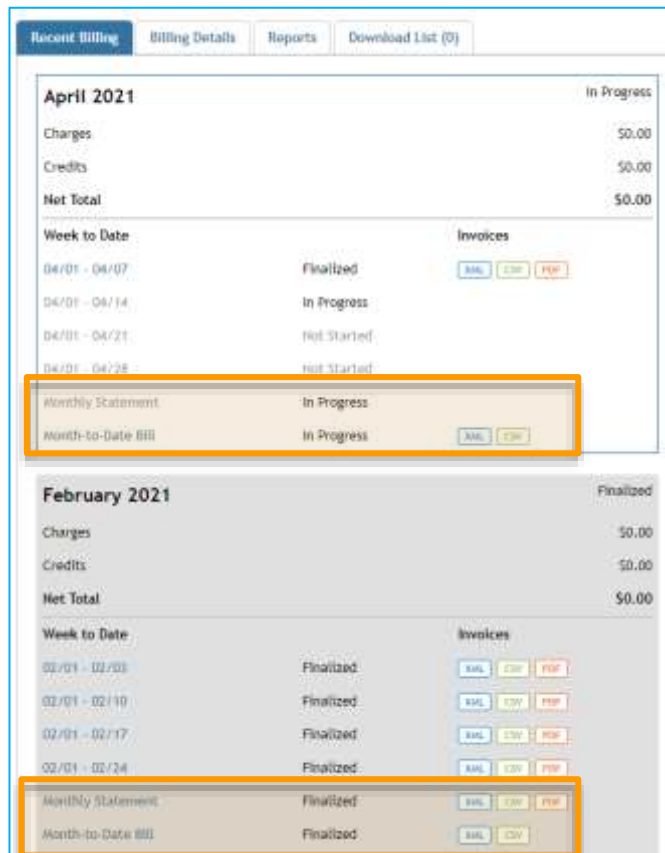
When you click a **Monthly Statement** link, you will be taken to the **Billing Details** tab to view a detailed statement. You can also download your statements as XML, CSV or PDF files by clicking the icons under the *Invoices* column.

Month-to-Date Bill

When you click the **Month-to-Date Bill** link, you will be taken to the **Billing Details** tab where you can see month-to-date details for that month. You can also download this information as an XML or CSV file by clicking the icons under the *Invoices* column. Month-to-date information is not available as a PDF.



Recent Billing		Billing Details	Reports	Download List (0)
March 2021		In Progress		
Charges				(\$33,639,085.02)
Credits				\$18,781,011.55
Net Total				(\$52,420,096.57)
Week to Date		Invoices		
03/01 - 03/03	Finalized	XML CSV PDF		
03/01 - 03/10	Finalized	XML CSV PDF		
Monthly Statement	In Progress			
Month-to-Date Bill	In Progress	XML CSV		



Recent Billing		Billing Details	Reports	Download List (0)
April 2021		In Progress		
Charges				\$0.00
Credits				\$0.00
Net Total				\$0.00
Week to Date		Invoices		
04/01 - 04/07	Finalized	XML CSV PDF		
04/01 - 04/14	In Progress			
04/01 - 04/21	Not Started			
04/01 - 04/28	Not Started			
Monthly Statement	In Progress			
Month-to-Date Bill	In Progress	XML CSV		
February 2021		Finalized		
Charges				\$0.00
Credits				\$0.00
Net Total				\$0.00
Week to Date		Invoices		
02/01 - 02/03	Finalized	XML CSV PDF		
02/01 - 02/10	Finalized	XML CSV PDF		
02/01 - 02/17	Finalized	XML CSV PDF		
02/01 - 02/24	Finalized	XML CSV PDF		
Monthly Statement	Finalized	XML CSV PDF		
Month-to-Date Bill	Finalized	XML CSV		

Bill Status

Under each billing cycle, you will see the status for each bill (“In Progress” for the current month and “Finalized” for all other billing cycles), charges, credits and the net total for the account being accessed.

The screenshot shows a grid of billing cycle summaries. The 'April 2021' cycle is highlighted with an orange border. A callout box provides a detailed view of the 'April 2021' cycle and the 'Week to Date' and 'Invoices' sections.

Month	Status	Charges	Credits	Net Total
April 2021	In Progress	50.00	50.00	\$0.00
March 2021	Finalized	50.00	50.00	\$0.00
February 2021	Finalized	50.00	50.00	\$0.00
January 2021	Finalized	50.00	50.00	\$0.00
December 2020	Finalized	50.00	50.00	\$0.00

Week to Date	Status	Actions
04/01 - 04/07	Finalized	[XML] [CSV] [PDF]
04/01 - 04/14	In Progress	
04/01 - 04/21	Not Started	
04/01 - 04/28	Not Started	
Monthly Statement	In Progress	
Month-to-Date Bill	In Progress	[XML] [CSV]

Quick Resources

A list of resources are available on the **Recent Billing** tab. Available resources are PJM Guide to Billing, Billing Calendar, Example Billing Statement, and MSRS User Guide.

The screenshot shows a 'Quick Resources' menu with the following items:

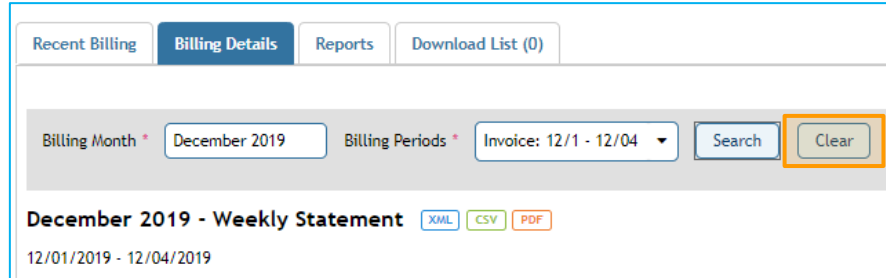
- PJM Guide to Billing
- Billing Calendar
- Example Billing Statement
- MSRS User Guide

The 'PJM Guide to Billing' and 'MSRS User Guide' items are highlighted with an orange border.

2.2 Billing Details Tab

The **Billing Details** tab provides details for billing months and other billing periods.

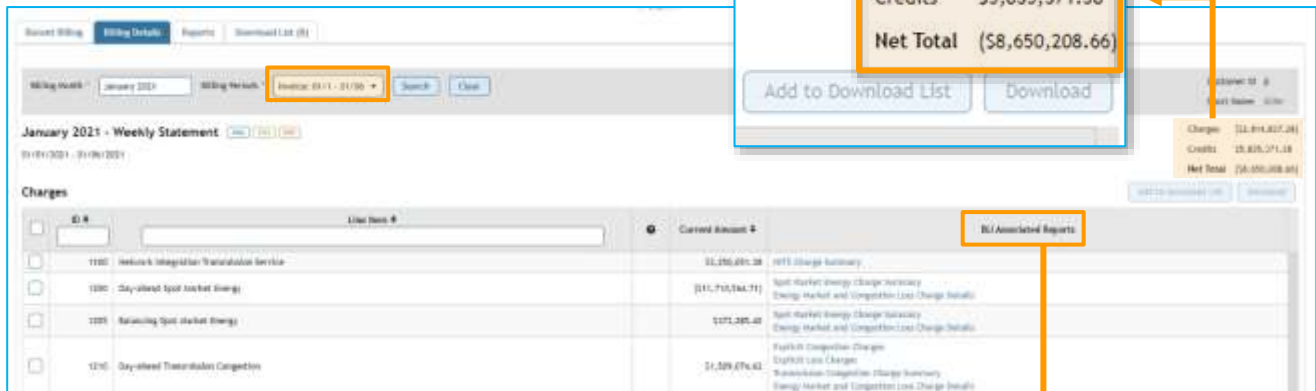
To see the Weekly Statements or Weekly Month-to-Date Statements select the XML, CSV or PDF icons for Weekly Statements and the XML and CSV icons for Weekly Month-to-Date Statements (PDF is not a supported format).



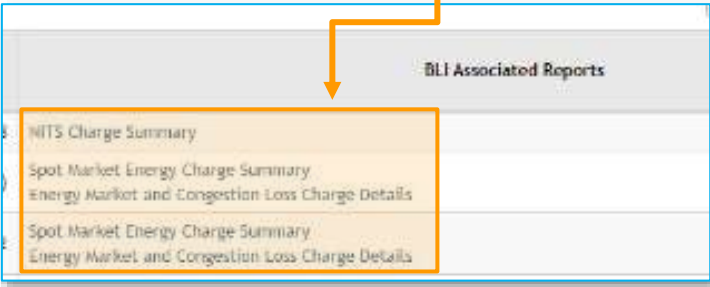
You can also filter by month and/or more granular billing periods. These filters can be reset by clicking **Clear**.

Invoice View

Charges, Credits and Net Total values for the Billing Month and Billing Periods are shown in the Billing Periods – Invoice view for the selected time frame.



Note: The values for Charges, Credits and Net Total are updated according to the billing month and billing periods selected.

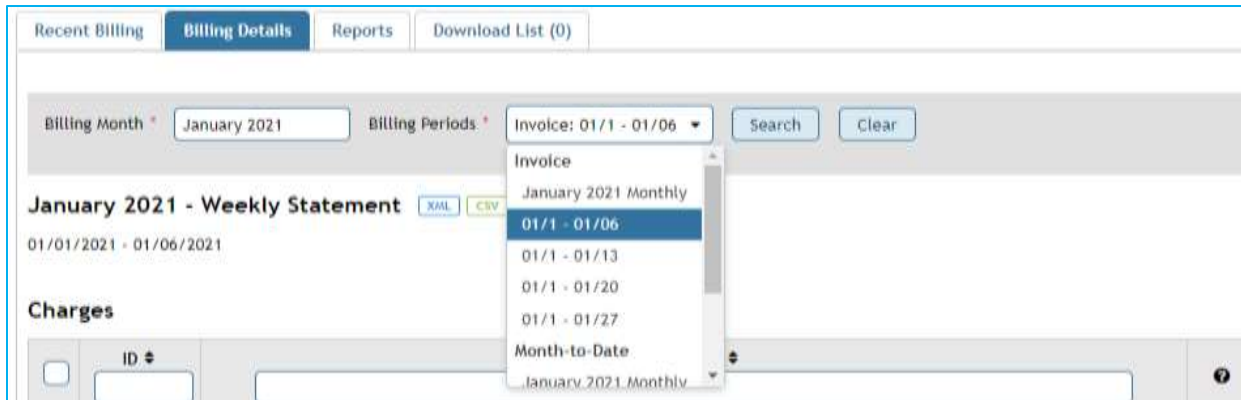


The Charges table includes an item's ID, Line Item, Footnotes, Current Amount and BLI Associated Reports and can be sorted and filtered. Click a link in the *BLI Associated Reports* column to download the report.

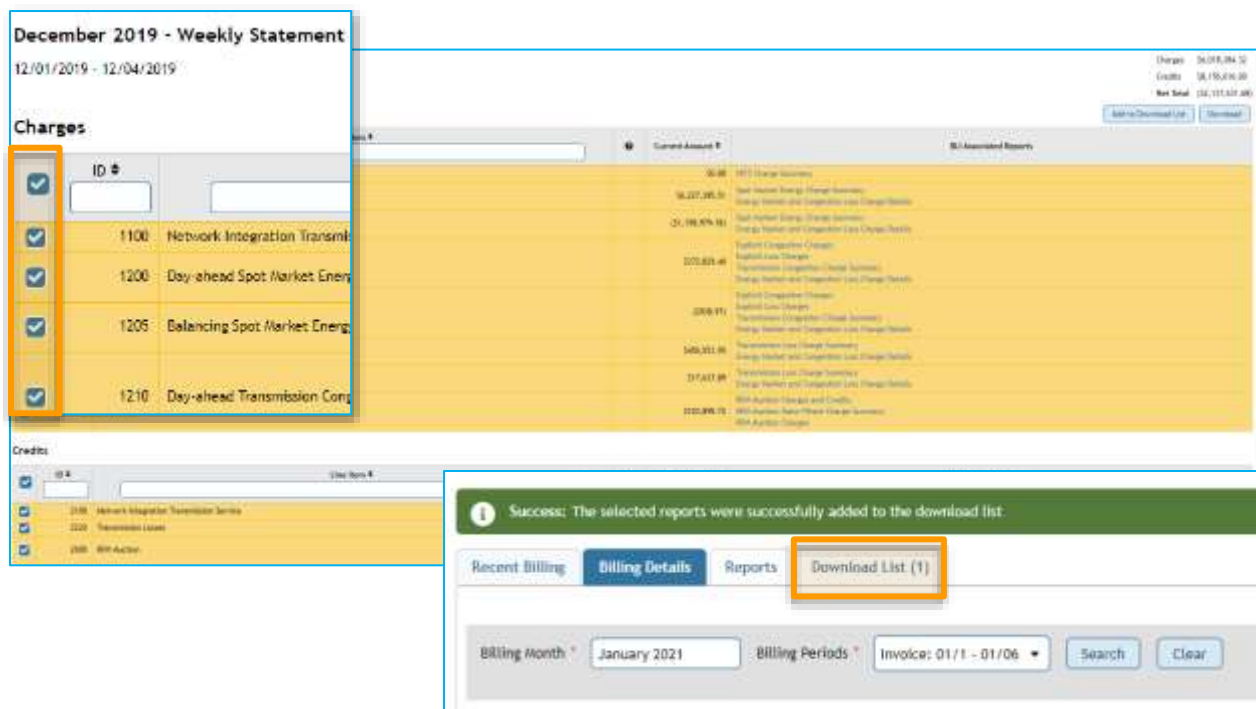
Note: For additional information on associated BLI ID's and MSRS report correlation, see [PJM's Guide to Billing \(PDF\)](#), which currently lists some of the main supporting MSRS reports with billing line items. Additionally, [PJM's MSRS Report Standards \(PDF\)](#) detail the relation of column numbers on reports to billing line items.

Once a Billing Month and Billing Period have been selected, you can then download the report immediately or add it to the Download List.

Download options for Weekly Statements are available in XML, CSV and PDF formats and by selecting individual or batch BLI Associated Reports, using the check box option, when a Billing Period is selected under the **Invoice** option. Month-to-Date bills can be downloaded by selecting the **Month-to-Date** option for the Billing Period. Month-to-Date bills are available for download in XML and CSV formats.

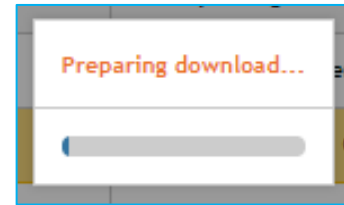


All available reports within a billing period can be downloaded at once by clicking the check box in the headers under Charges and Credits. Once a report or reports have been selected, you can click **Add to Download List** or **Download**.



After clicking **Add to Download List**, the selected reports will be added to the **Download List** tab, so they can be downloaded later.

After clicking **Download**, the selected reports will be downloaded in the default format associated with each report. To download the report in a different format, you can customize the format from the **Reports** tab. A progress bar will appear indicating that the download is being prepared. Once this is complete, a file will be generated for download.



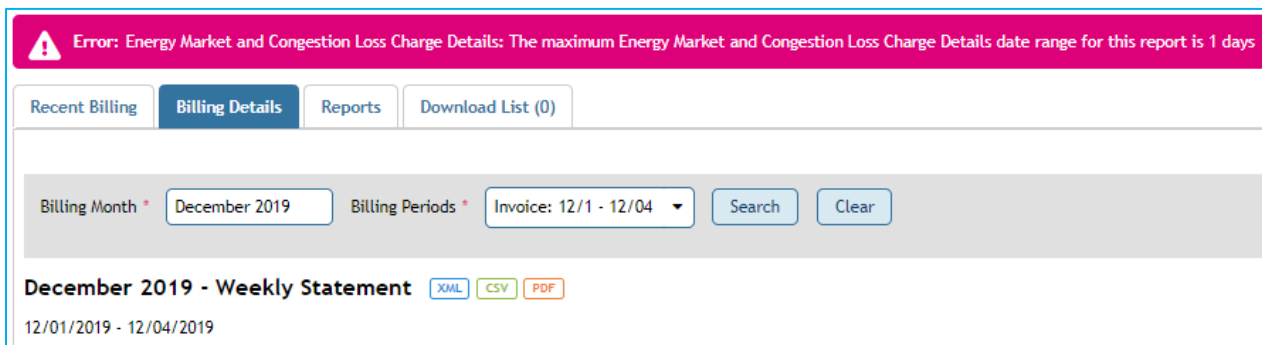
Reports can be downloaded in batches of 25 at a time. This does not impact the amount of reports that can be added to the Download List. A warning message will appear when that limit has been reached.



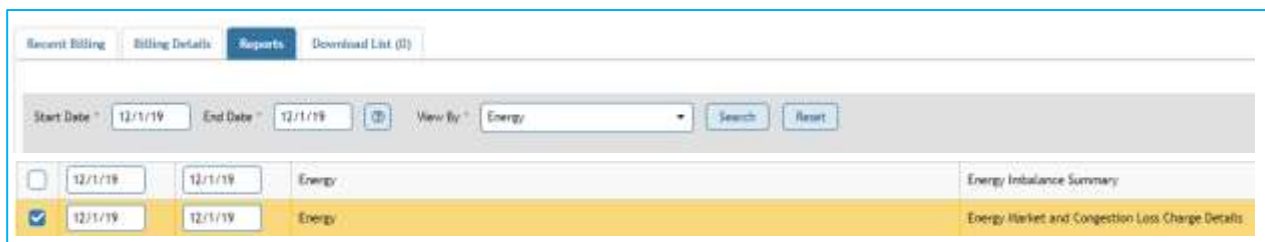
Maximum Date Ranges

Some reports have maximum date ranges where the minimum billing period exceeds that time frame.

For example, the Energy Market and Congestion Loss Charge Details report cannot be downloaded or added to the Download List from the **Billing Details** tab by default for a billing period of 12/01–12/04. This is because the maximum date range for that report is one day.



To add this report or others with a similar issue to the Download List or to download immediately, navigate to the **Reports** tab and enter the start date and end date for the same day (or the appropriate maximum date range for that report). Then select the report category in the **View By** drop-down and select **Search**. Select the report to activate the **Add to Download List** and **Download** options.

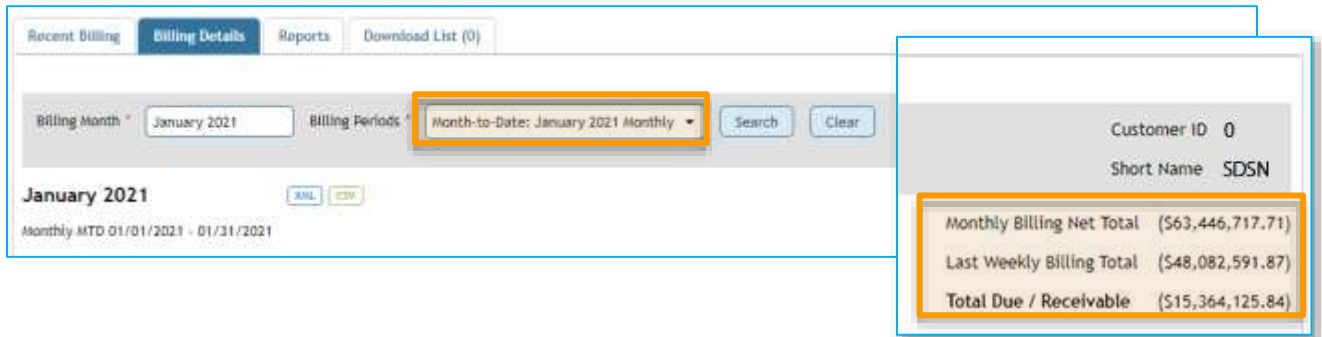
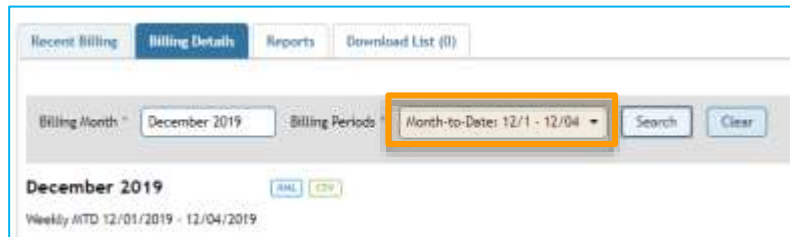


The following error message will occur when a batch of reports selected has a report included with a maximum date range that has been exceeded:



Month-to-Date View

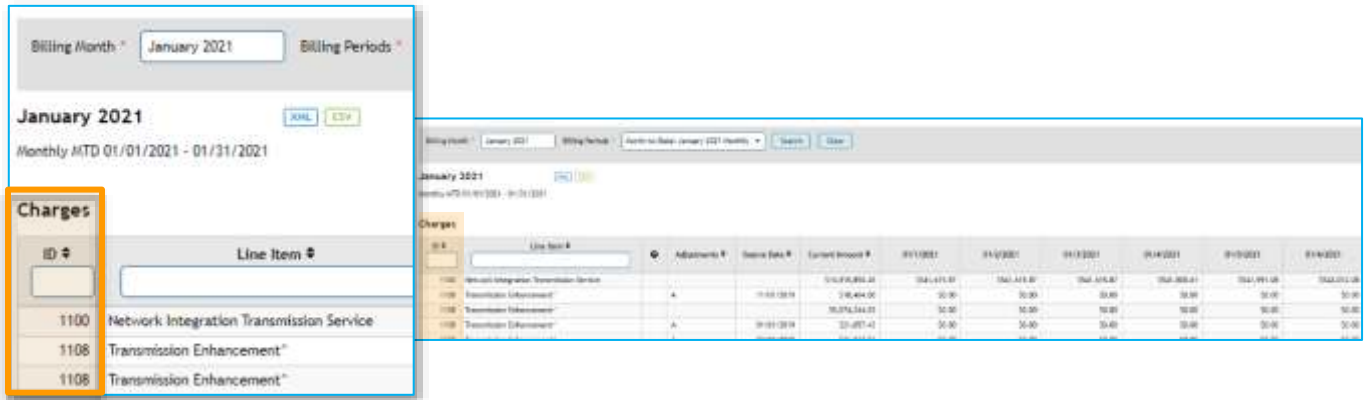
Static data for the Customer ID, Short Name, Monthly Billing Net Total, Last Weekly Billing Total and Total Due/Receivable is displayed in the header of the page for the selected time frame.



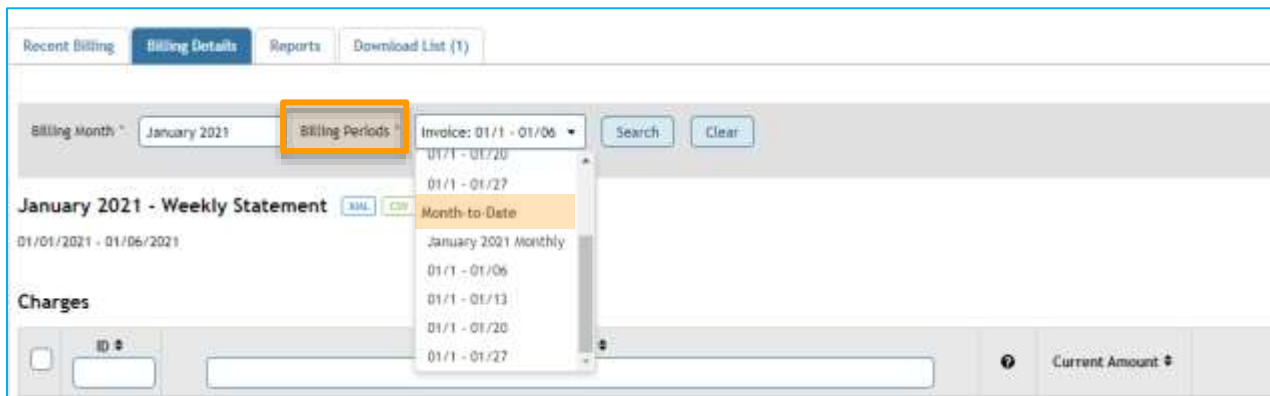
The Charges, Credits and Net Totals sections include the following details:

- Billing Line Item ID
- Line Item
- Footnotes (ability to show if an adjustment has occurred)
- Current Amount
- Billing Periods (will only display the billing period selected in the Billing Periods drop-down)
- Total Charges (sum of charges)
- Total Credits (sum of credits)
- Net Total (sum of charges and credits)

Within the Charges and Credits sections, information can be filtered by ID, Line Item and Current Amount and can be sorted in ascending or descending order. Line Items and IDs can also be searched.



To view billing line-item value details, select the **Month-to-Date** option in the **Billing Periods** drop-down:



This selection shows the ID, Line Item, Footnote, Adjustments, Source Date, Current Amount and dates (dates shown will reflect the time selected in the **Billing Periods** drop-down) for billing line items. Information can be filtered by ID, Line Item and Current Amount for Charges and Credit.

Billing Month: Billing Periods:

January 2021

Monthly MTD 01/01/2021 - 01/31/2021

Charges

ID	Line Item	Adjustments	Source Date	Current Amount	01/1/2021	01/2/2021
1100	Network Integration Transmission Service			\$16,815,850.45	\$541,615.87	\$541,615.87
1108	Transmission Enhancement*	A	11/01/2019	\$18,464.00	\$0.00	\$0.00
1108	Transmission Enhancement*			\$5,074,344.03	\$0.00	\$0.00
1108	Transmission Enhancement*	A	01/01/2019	\$21,057.43	\$0.00	\$0.00
1108	Transmission Enhancement*	A	03/01/2019	\$21,017.51	\$0.00	\$0.00
1108	Transmission Enhancement*	A	02/01/2019	\$20,913.87	\$0.00	\$0.00
1108	Transmission Enhancement*	A	05/01/2019	\$20,686.57	\$0.00	\$0.00
1108	Transmission Enhancement*	A	04/01/2019	\$20,641.09	\$0.00	\$0.00
1108	Transmission Enhancement*	A	06/01/2019	\$19,472.43	\$0.00	\$0.00
1108	Transmission Enhancement*	A	07/01/2019	\$18,954.59	\$0.00	\$0.00
1108	Transmission Enhancement*	A	08/01/2019	\$18,840.86	\$0.00	\$0.00
1108	Transmission Enhancement*	A	09/01/2019	\$18,809.23	\$0.00	\$0.00
1108	Transmission Enhancement*	A	12/01/2019	\$18,568.85	\$0.00	\$0.00
1108	Transmission Enhancement*	A	10/01/2019	\$18,545.60	\$0.00	\$0.00
1115	Transmission Enhancement Settlement (EL05-121-009)*			\$152,952.81	\$0.00	\$0.00
1130	Firm Point-to-Point Transmission Service*			\$0.00	\$0.00	\$0.00
1133	Firm Point-to-Point Transmission Service Resale			\$761,789.04	\$24,573.84	\$24,573.84
Total Charges				(\$24,955,762.49)	(\$231,592.64)	(\$201,135.12)

Credits

ID	Line Item	Adjustments	Source Date	Current Amount	01/1/2021	01/2/2021
2100	Network Integration Transmission Service			\$0.00	\$0.00	\$0.00
2108	Transmission Enhancement	A	11/01/2018	\$2,190.35	\$0.00	\$0.00

2.3 Reports Tab

The **Reports** tab lets you generate and download MSRS reports. To generate a specific report or all reports for a certain time frame, the **Start Date** and **End Date** and **View By** options must be selected. Once selected, click on **Search** to populate the reports or **Reset** to clear the fields.

Recent Billing | Billing Details | **Reports** | Download List (0)

Start Date * 5/1/21 End Date * 5/1/21 ⓘ View By * Billing (Monthly) Search Reset

Once the reports have been generated, you can choose to **Add to Custom Category**, **Manage Custom Categories** (if a Custom Category has already been created), **Add to Download List** or **Download**. Select a report or reports, then click one of the options to complete that action. To select every report, click the check box in the header.

Start Date * 5/1/21 End Date * 5/1/21 ⓘ

Add to Custom Category Manage Custom Categories

Add to Download List Download

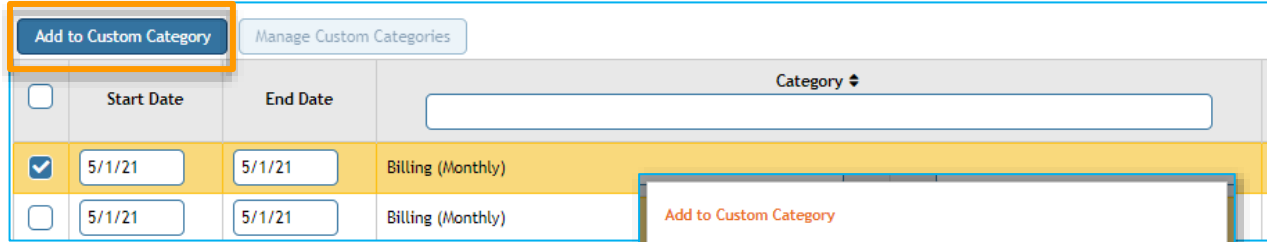
<input checked="" type="checkbox"/>	Start Date	End Date	Version	Format	Company
<input type="checkbox"/>	5/1/21	5/1/21			
<input type="checkbox"/>	5/1/21	5/1/21			
<input type="checkbox"/>	5/1/21	5/1/21			
<input type="checkbox"/>	5/1/21	5/1/21			
<input type="checkbox"/>	5/1/21	5/1/21			
<input type="checkbox"/>	5/1/21	5/1/21			
<input type="checkbox"/>	5/1/21	5/1/21			

Change the number of records you see per page by choosing 10, 25 or 50 from the drop-down menu at the bottom of the screen.

Records Per Page: 10 << < 1-10 of 188 records > >>

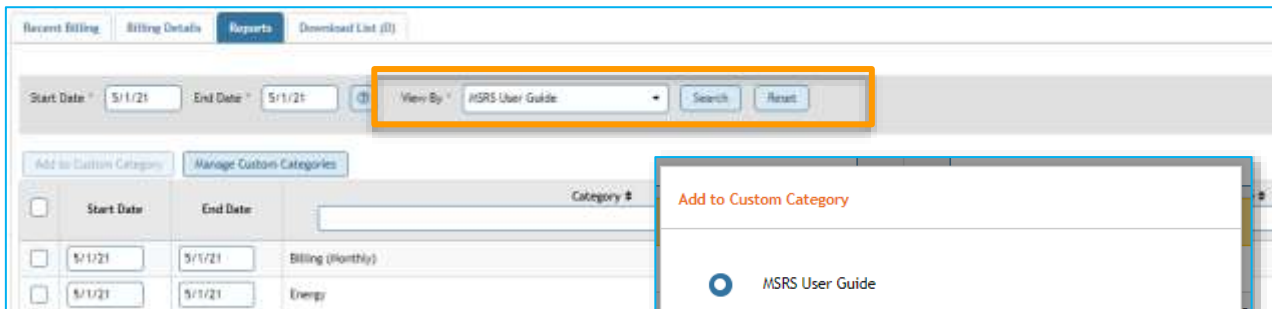
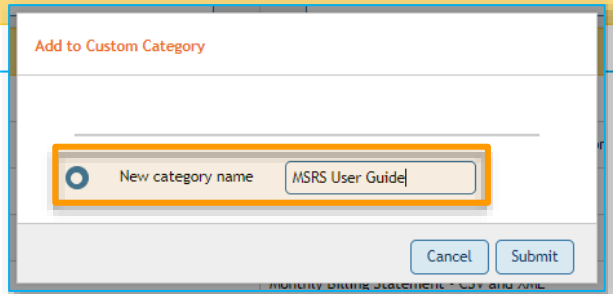
Add to Custom Category

To add a report or reports to a Custom Category, select the reports you want added and click **Add to Custom Category**. To select every available report, click the check box in the header.

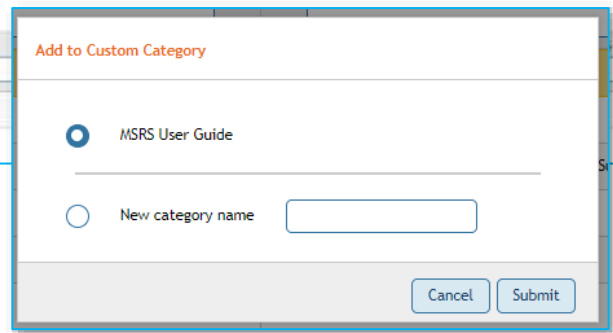


Next, create a name for the custom category then click **Submit**. To go back, click **Cancel**.

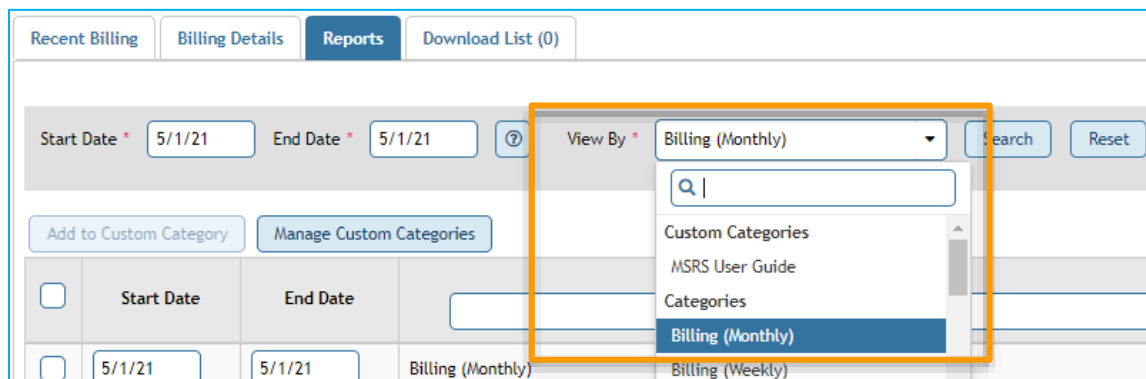
Once the Custom Category has been created, it will be available in the **View By** drop-down.



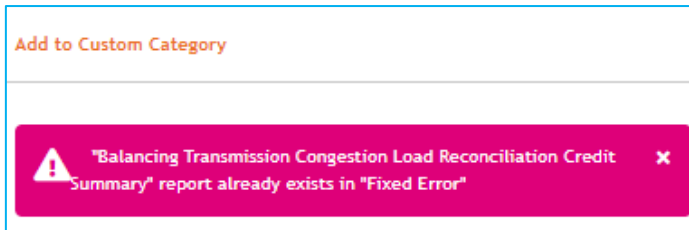
Once the Custom Category has been created, you can add additional reports by selecting a report, then clicking **Add to Custom Category**. You can then select the Custom Category that you have created and click **Submit**. To go back, click **Cancel**.



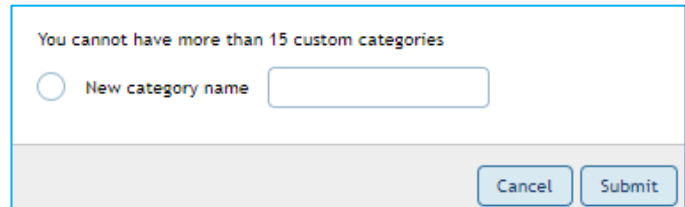
To view reports within the categories, select the name in the **View By** drop-down and click **Search**.



If a report already exists within a Custom Category, the following will appear:



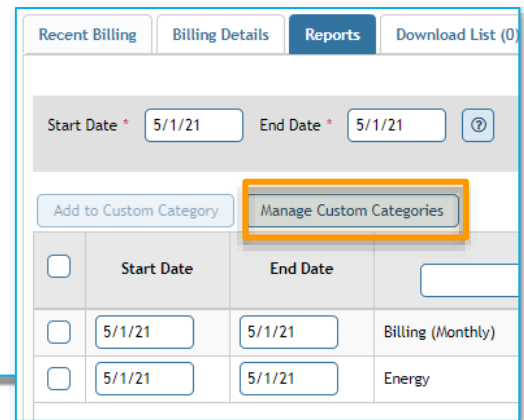
Only 15 Custom Categories can be created per user. If you exceed this limit and attempt to create more categories, a message will display stating that you cannot have more than 15.



Manage Custom Categories

Once a Custom Category has been created, it can be managed or deleted by selecting **Manage Custom Categories**. If you would like to delete individual reports from within a category, select the reports that should be deleted and click **Delete Report**.

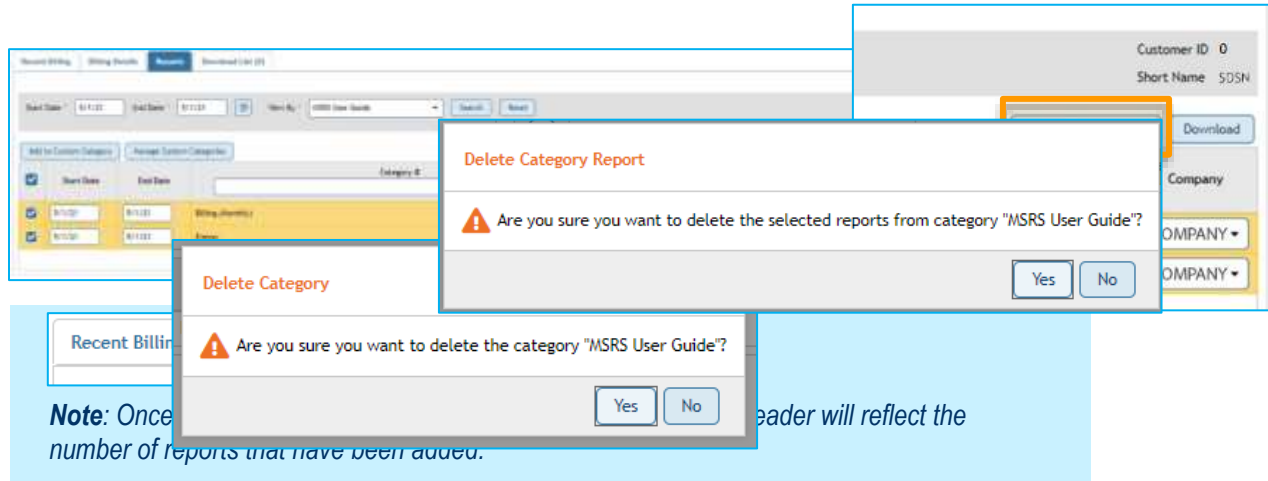
Click **Delete Custom Category** to delete the category and all of the reports contained within it. Once the category has been deleted, it will no longer be available in the **View By** drop-down menu.



Click **Yes** in the pop-up message to confirm deletion. Click **No** to cancel.

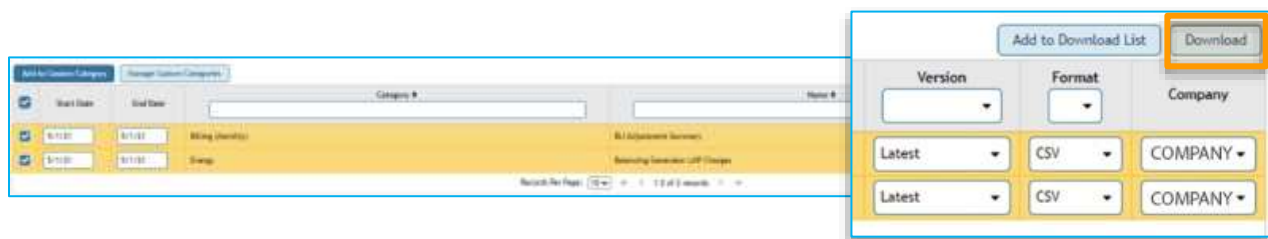
Add to Download List

Reports can be added to the Download List from within the **Reports** tab. To add reports to the Download List, select the reports individually or select every report on the page by clicking the option in the header and click **Add to Download List**.

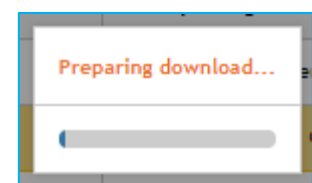


Download

Selected reports can also be downloaded directly from within the **Reports** tab. To download reports, select the appropriate **Start Date**, **End Date** and the **View By** option and click **Search**. This will generate a list of reports that can be selected individually or all at once by clicking the select all box in the header. Then click **Download**.




The select all check box only selects the reports shown on the current page. For example, if the records per page is set to 10, and your list includes 20 reports, only the first 10 reports in that list will be selected.




A progress bar will appear indicating that the download is being prepared. A file will be generated once this is complete.

Messages at the top of the screen of the **Reports** tab will appear when actions are completed successfully. Some examples are:

Note: *The Month-to-Date SUMA report supports downloads and allows for multiple organization downloads. This has a different design structure than the Month-to-Date Bill report and includes a new column to help differentiate between organizational data when multiple are present.*

 **Success:** The selected reports were successfully downloaded.

 **Success:** The category was saved successfully

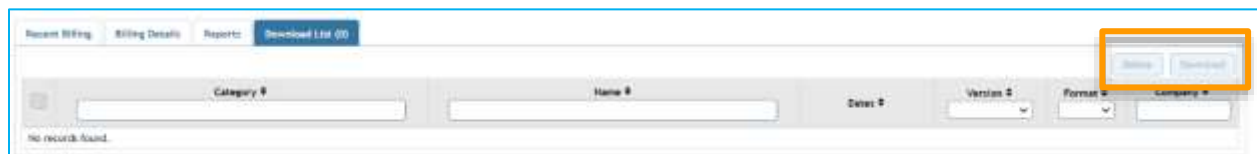
 **Success:** The selected reports were successfully added to the download list

Reports can be downloaded in batches of 25 at a time. This does not impact the amount of reports that can be added to the Download List. However, once added to the Download List, only 25 reports will be downloaded at a time. A warning will occur when that limit has been reached.

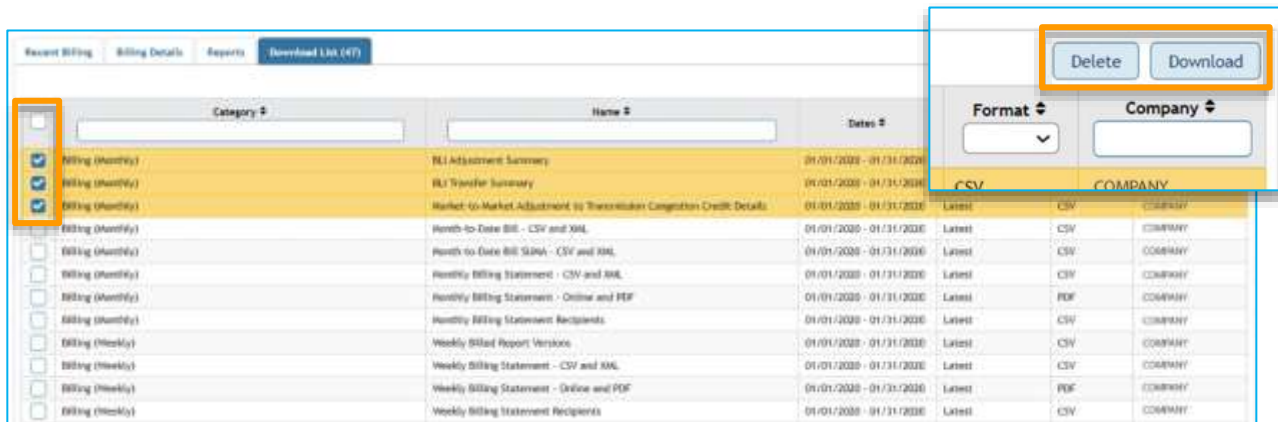
 **Warning** You cannot download more than 25 reports at a time.

2.4 Download List Tab

Reports can be added to the **Download List** tab from the **Billing Details** tab and **Reports** tab. When the Download List is empty, the **Delete** and **Download** buttons are both inactive.



Once reports have been added to the Download List, the **Delete** and **Download** buttons will become active when reports are selected. Reports can be selected individually or all at once.



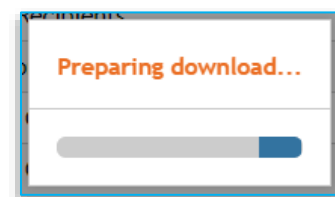
The example below shows three individual reports selected out of a selected larger number of available reports.

The select all option in the header will select every report on the page. However, only 25 reports can be downloaded at a time. There is no limit to how many reports can be deleted at one time.

If more than 25 reports are selected, the **Download** option will remain inactive, and a warning prompt will be generated.



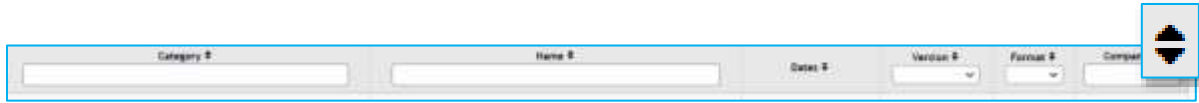
After clicking **Download**, a progress bar will appear indicating that the download is being prepared. A file will be generated once this is complete.



Once a report in the Download List has been deleted or downloaded, it will be removed from the list.

Note: The date range for a report cannot be changed once it has been added to the Download List. To edit any information associated with the download, navigate to the **Billing Details** or **Reports** tab > make edits > select the options for download > add to Download List.

Reports in this section can be sorted and filtered by Category, Name, Dates, Version, Format and Company. Category and Name can also be searched by text.



A horizontal control bar with a light gray background and a blue border. It contains six input fields: 'Category #', 'Name #', 'Dates #', 'Version #', 'Format #', and 'Company #'. The 'Dates #', 'Version #', and 'Format #' fields are dropdown menus. A black and white icon of a person is on the right side of the bar.

3 Using the MSRS Tool Without a Browser

MSRS can also be accessed without a web browser. You can access and download report files through a URL-based browserless API or through PJM's Command Line Interface (CLI).

The Rest URL can be used and accessed in several ways including: curl, Excel macro/visual basic, or any other programming language that can send HTTP requests. More information on PJM's CLI can be found on the [System Requirements page](#) for PJM Tools.

Browserless HTTP Coding Examples

New browserless URL and token-based authentication examples are available:

- [Coding Examples for Browserless HTTP Request with Token Based Authentication](#) (PDF)
- [Instructions for Using the Browserless.do URL – SUMA and New Authentication](#) (PDF)

CLI Functionality

The refreshed MSRS application is now included as part of [PJM's CLI functionality](#) (ZIP).

For troubleshooting, please contact the [Market Settlements Development](#) Department.

4 MSRS Supporting Documentation

- [Reports](#)
- [Instructions for Using the Browserless.do URL – SUMA and New Authentication](#) (PDF)
- [Coding Examples for Browserless – Token Based](#) (PDF)
- [MSRS Refresh FAQ](#) (PDF)
- [Refreshed MSRS Demonstration](#)
- [MSRS Release Notes](#)
- [Member Community](#)