



Cost Agent User Guide

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For Public Use

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Requesting Access to Cost Agent

Access to Cost Agent is granted through Account Manager. Your company's Company Account Manager (CAM) can either directly assign your access, or you can request access, which your CAM will then need to approve. CAMs do not need to have Cost Agent access in order to grant access to others in the company. If a CAM needs access to Cost Agent, the request will be automatically approved.

To request access, sign in to **Account Manager** and follow the steps below. If you do not already have an account, instructions for creating one can be found on the **Sign In** page (Figure 1), under User Guides.

Figure 1. Account Manager Sign In Page

	Date
New User Registration Workflows Quick Guide PDF	7.20.2023
API Guide PDF	6.29.2023

Once signed in to your account, navigate to the **Account Access** tab (Figure 2) and click **Request Access**.

Figure 2. Account Access Tab and Request Access Button

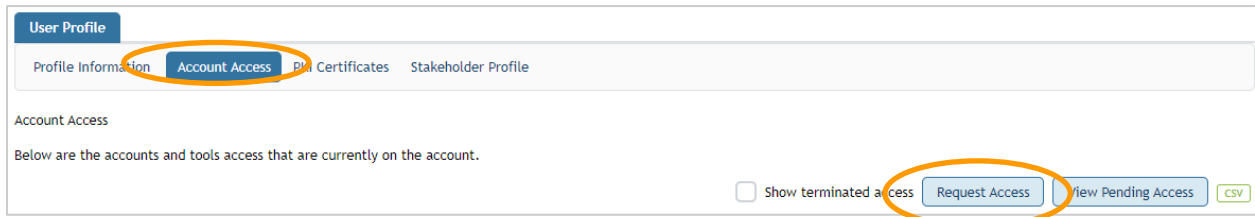
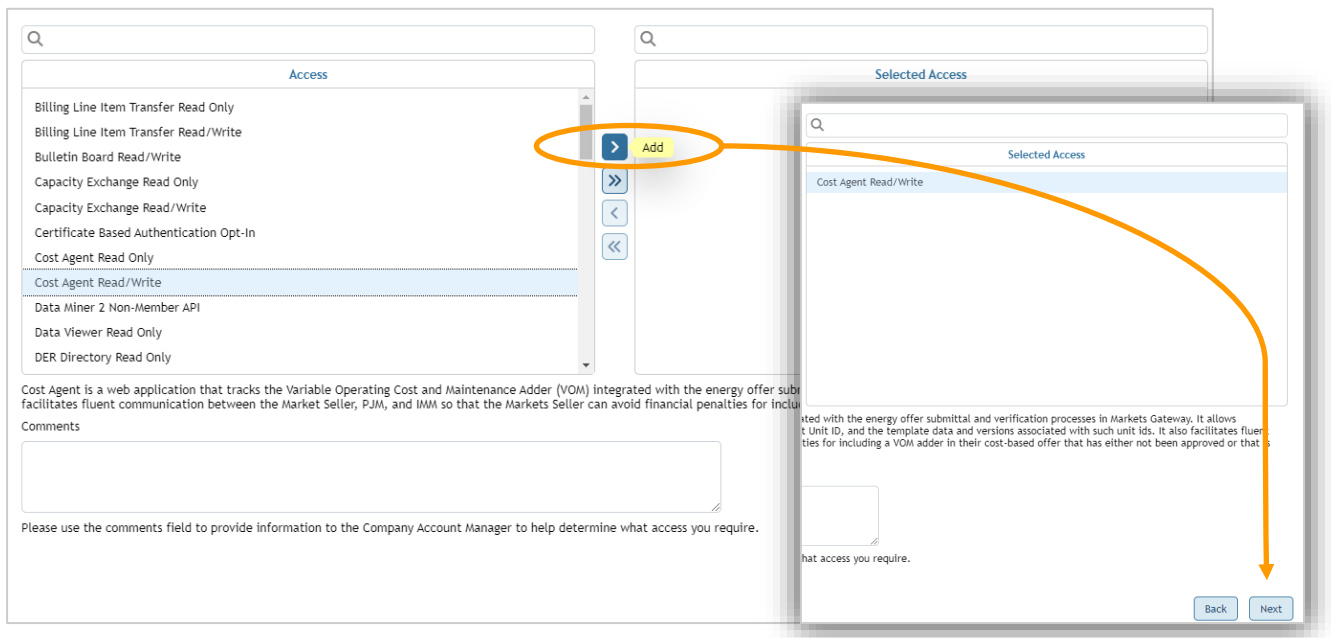


Figure 3. Request Cost Agent Read/Write Access

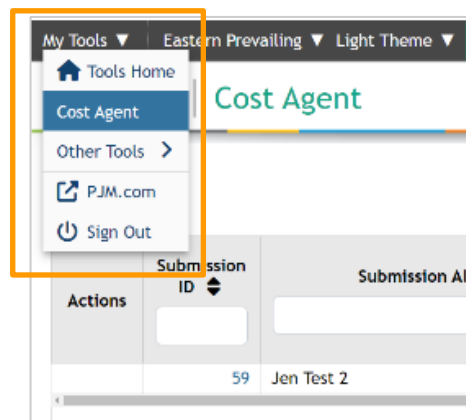


On the *Request Access* screen (Figure 3), be sure to first add all accounts for which you will need Cost Agent access. If you need a different type of access for different accounts – Read Only versus Read/Write, for example – the requests should be separate.

Then, in the Access box:

- Highlight Cost Agent Read/Write.
- Click the Add arrow to move it to the *Selected Access* box.
- Then click **Next** at the bottom right of the screen. After clicking **Next**, review your request and click **Submit** on the final screen.

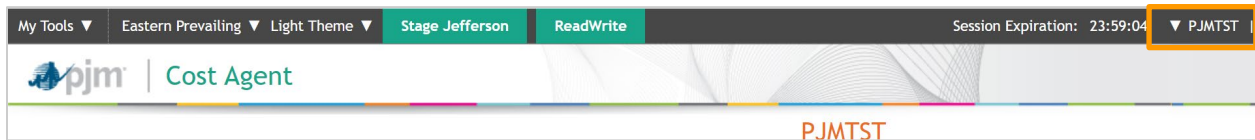
Once access is granted, Cost Agent can be opened from the **My Tools** menu.



Accessing Your Account(s) in Cost Agent

If you have requested Cost Agent access for more than one account, you will be able to switch between various accounts by clicking the down arrow next to the currently active account (Figure 4) and selecting a different account. If you only have Cost Agent access for one account, there won't be an arrow.

Figure 4. Account Access Tab and Request Access Button



Assigning Primary Contacts in Cost Agent

Any time there is a status change to a submission in Cost Agent, anyone who is designated as a Primary Contact for the company's account in Cost Agent will receive an email notification. If no one is designated as the Primary Contact, then all people on the account will receive all of the emails related to submissions. Multiple Primary Contacts can be selected.

To set up Primary Contacts, click the down arrow next to **Create New Submission**. Next, click **Settings** (Figure 5).

Figure 5. Navigate to Settings Tab

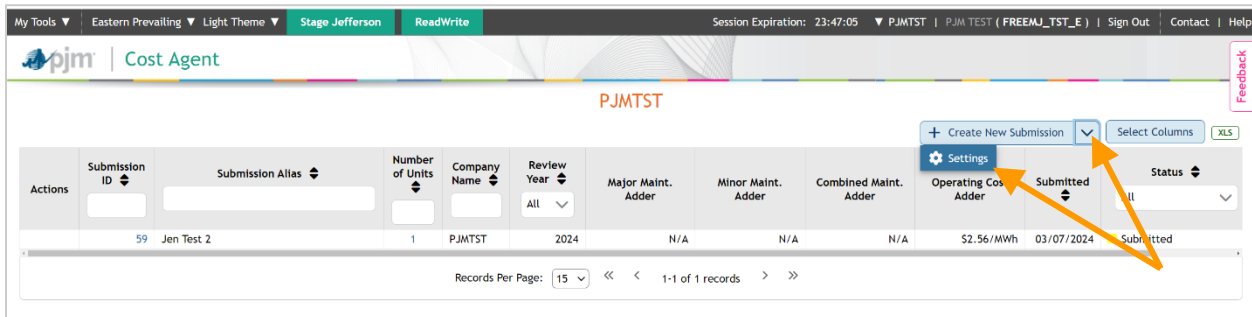
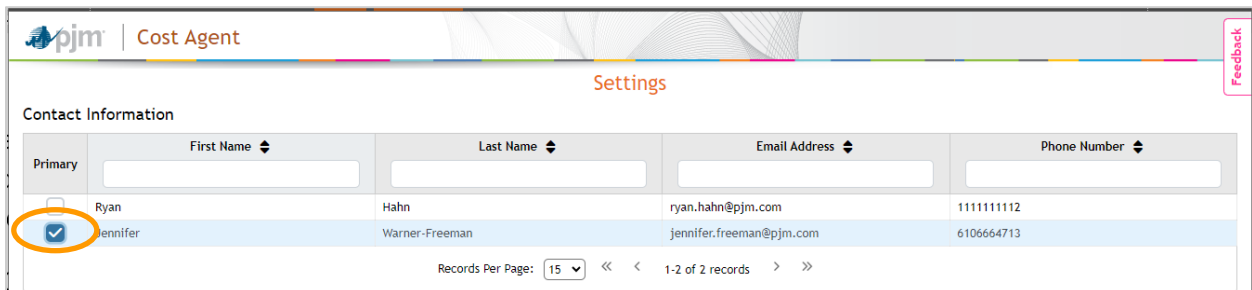


Figure 6. Select Primary Contacts



Once on the **Settings** page (Figure 6), you should see a list of all people who have access to the account. Check the box for any/all people who should receive submission status update emails. Anyone on the account with Read/Write access should be able to make the Primary Contact assignments.

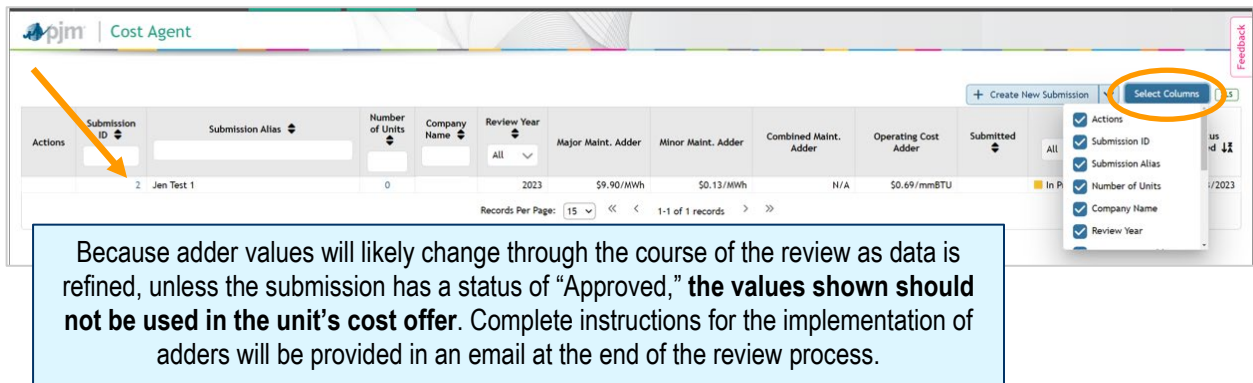
Viewing Current Submissions

Main Page Navigation

From the main page in Cost Agent, you will be able to view all submissions for your organization. Anyone in your organization with Read Only or Read/Write access to Cost Agent will be able to see all submissions made by others within the organization. Permissions to submissions are on an organization level, not an individual user level.

As shown in Figure 7, you can decide which columns you wish to see in this view by clicking **Select Columns**. The default view includes the Submission ID, Submission Alias, the *current* adder values and the status of the submission. Click the **Submission ID** to view the detailed submission data.

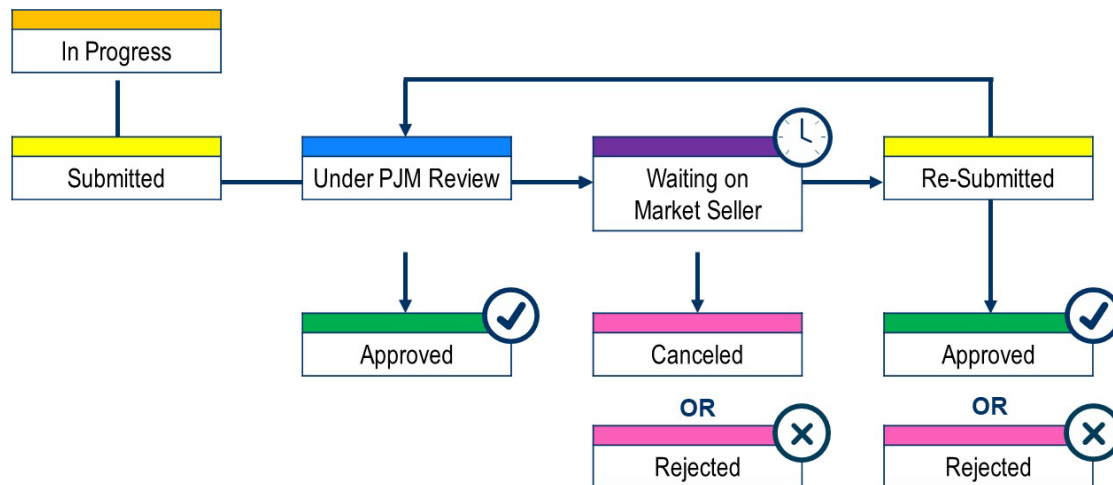
Figure 7. View Submissions and Customize View



Submission Status

All submissions will show the current status. Only submissions with statuses of "In Progress" or "Waiting on Market Seller" will be editable by the market seller. An "In Progress" submission is one in which the user has clicked "Save for Later" on an incomplete submission. Colors in **Figure 8** correspond to the colors in the Status column.

Figure 8. Submission Status Flow



Creating a New Submission From a Blank Form

To create a new submission, click **Create New Submission** (Figure 9). In the *Create New Submission* dialog box, select the **Blank Form** option (Figure 10). Once a unit has a submission initially set up in Cost Agent, the user will be able to build on to that unit's submission in future years, assuming the unit remains in the same account.

Figure 9. Create New Submission Button

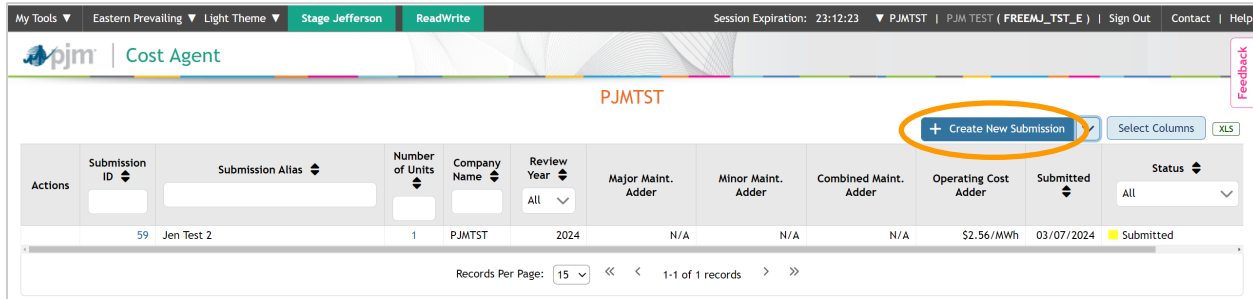


Figure 10. Create New Submission From a Blank Form

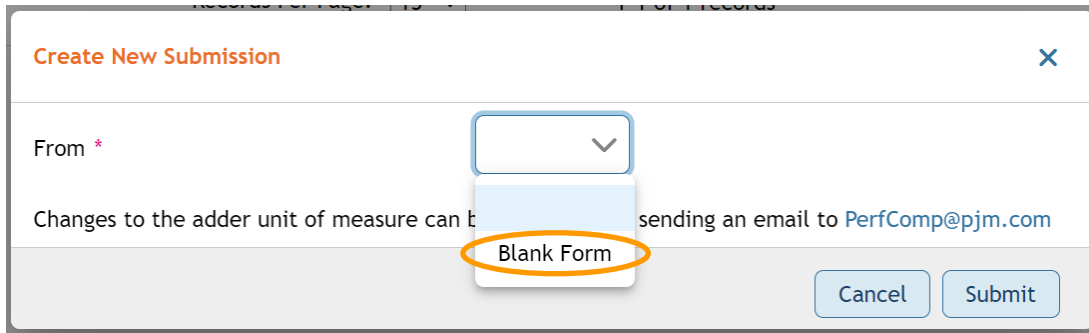


Figure 11. VOM Adder Options

Maintenance Adder

Major Maintenance

Submit for PJM/IMM Review/Approval

Minor Maintenance

Use Minor Maintenance Default Adder

OR

Submit for PJM/IMM Review/Approval

Operating Costs

Use Operating Costs Default Adder

OR

Submit for PJM/IMM Review/Approval

Your choice to use unit-specific or default adders will impact your selections in the *Create New Submission* form (Figure 12).

Default adders for Minor Maintenance and/or Operating Costs do not require data entry into Cost Agent.

1. On the *Create New Submission* form (Figure 12), add an alias for the submission. It is recommended to use the unit name.
2. Check the boxes for the unit-specific adders desired: Maintenance Adder, Operating Costs, or both. If you only want one type of adder – Operating Costs, for example – then uncheck the box for the other type of adder. Default adders for Minor Maintenance and/or Operating Costs do not require data entry into Cost Agent.
3. For Maintenance Adders, select if you want a unit-specific major maintenance adder only, a unit-specific minor maintenance adder only, or both unit-specific major and minor maintenance adders. A combined submission is reserved only for unit types for which PJM does not have default adders developed.
4. For all requested adders, a unit of measure must be selected. Examples include \$/MWh or \$/mmbtu.
5. Last, for the operating cost adder, the calculation basis – whether the adder is based on a fixed period or based on a rolling average – must be specified.
6. Once all selections are made, click **Submit** to continue.

Figure 12. Create New Submission Form

The screenshot shows the 'Create New Submission' form with the following fields and callouts:

- From ***: Blank Form (dropdown)
- Submission alias ***: Unit 10 CT (text input, callout 1)
- Maintenance Adder**: (checkbox)
- Adder unit of measure (Major) ***: \$/MWh (dropdown, callout 4)
- Adder unit of measure (Minor) ***: \$/MWh (dropdown, callout 4)
- Operating costs**: (checkbox)
- Adder unit of measure ***: \$/mmBTU (dropdown, callout 4)
- Calculation basis ***: Fixed Average (dropdown, callout 5)
- Major and minor**: Major and minor (dropdown, callout 3)

Callout 2 points to the checkboxes for Maintenance Adder and Operating costs. Callout 6 points to the Submit button.

Informational Callout: If you need multiple of a particular type of adder – for example, major maintenance adders based on starts AND run hours – then an additional submission will be required. Enabling multiple adders of a particular type in a single submission is an enhancement planned for a future release.

Changes to the adder unit of measure can be requested by sending an email to PerfComp@pjm.com

Adding Data to a New Submission

After clicking **Submit** on the *Create New Submission* form, a **New Submission** page will come up.

Add Units to the Submission

1. Click **Add** above the *Unit Information* box to add unit(s) to the submission. The *Add Unit* dialog box will pop up (Figure 13).
2. Click the down arrow to get a list of units assigned to your account. Select the unit you wish to add.
3. Click **Submit**.

As in the past, if you have multiple units of the same technology type at the same plant, those units can be combined into one submission. Adding multiple units to one submission can be achieved by repeating the *Add Units to the Submission* steps. Once you have added the necessary unit(s) to the submission, the results should look similar to the image in **Figure 14**.

Figure 13. New Submission Form, Add Unit Box

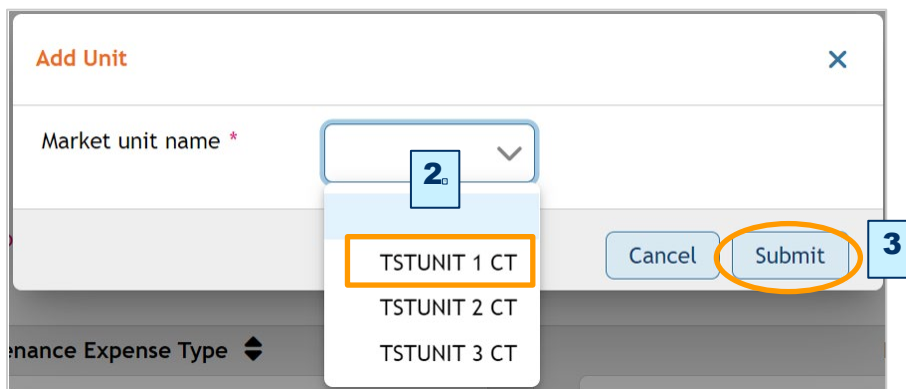
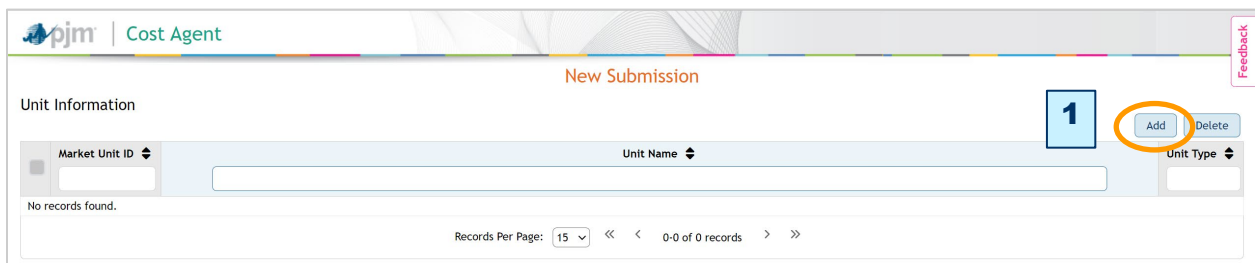
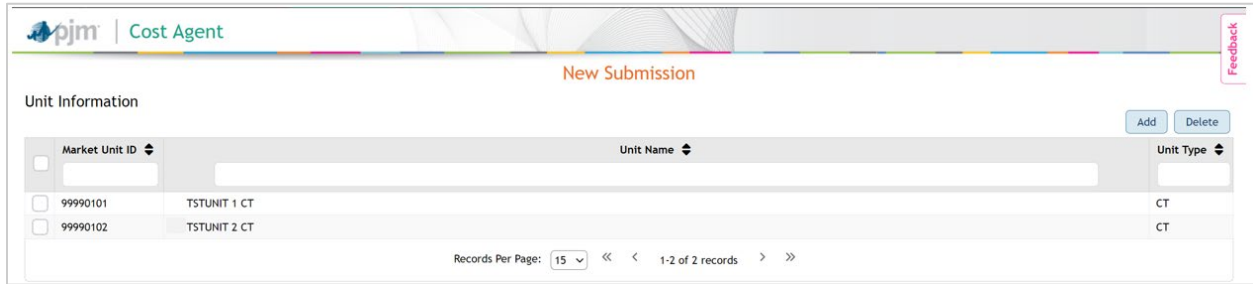


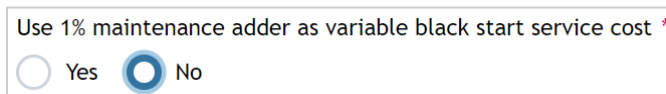
Figure 14. Units Added to New Submission Form Example



Make Black Start Selection

Select the **Yes** or **No** radio button (Figure 15). This selection will populate only if the Major and Minor maintenance have the same unit of measure, or if a combined maintenance adder was selected. Please note this selection is optional. If selected, the maintenance adder for black start units shall be calculated with 1% of total maintenance expenses removed.

Figure 15. Black Start Selection Buttons

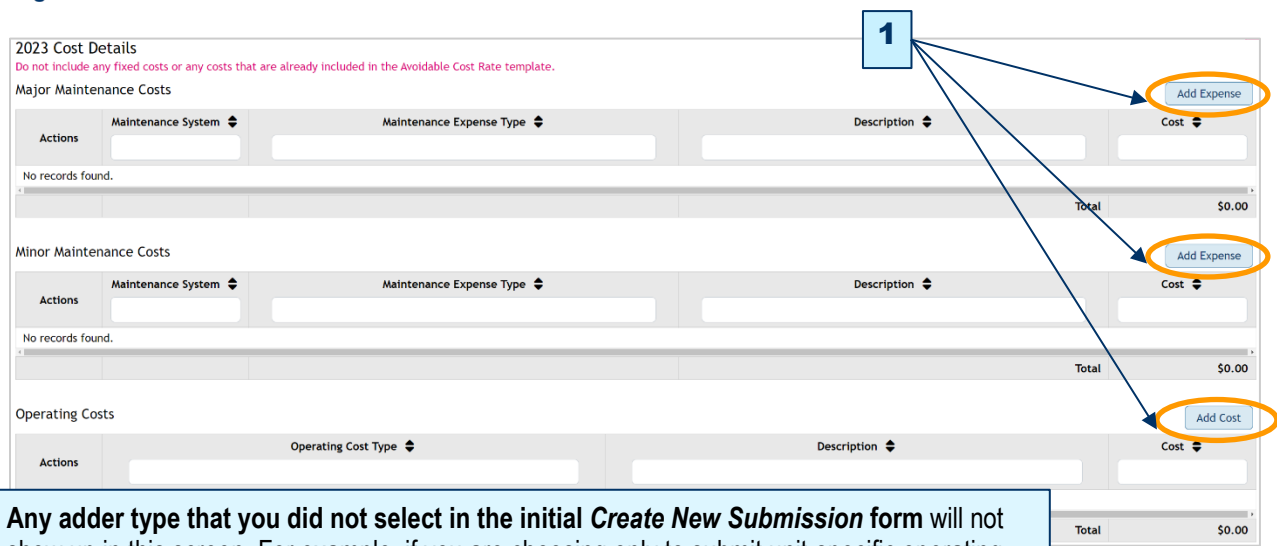


Enter Last Year's Detailed Cost Information

As with previous VOM submissions, only the most recent year requires detailed expense/cost information.

1. Add each expense/cost by first clicking **Add Expense** or **Add Cost** (Figure 16).

Figure 16. Cost Details Form



Any adder type that you did not select in the initial *Create New Submission* form will not show up in this screen. For example, if you are choosing only to submit unit-specific operating costs, neither of the maintenance expense tables should show up.

After clicking the **Add** button, an *Add Expense/Add Cost* box will come up (Figure 17). When entering a new expense/cost:

2. For maintenance expenses, select the *Maintenance System*.
3. Select an *Expense* type or *Operating Cost* type. For expenses/costs that do not fit in the pre-populated categories, select **Other** and be sure to add explanatory detail to the Description field.
4. Populate the Description field. This is a free-form text box. The description should include enough detail so that it is clear what work was performed. For example, for Maintenance System = Combustion Turbine, and Expense Type = turbine blades repair/replacement, an acceptable Description could be “high-pressure turbine blade #3 replaced.”
5. Add the dollar amount for the expense/cost.
6. Add a documentation reference. This could be the file name or, more specifically, a location in the file where the expense/cost is documented.
7. Click **Submit**.
8. Repeat steps 1–7 for each expense/cost.

Figure 17. Add Expense and Add Cost Boxes

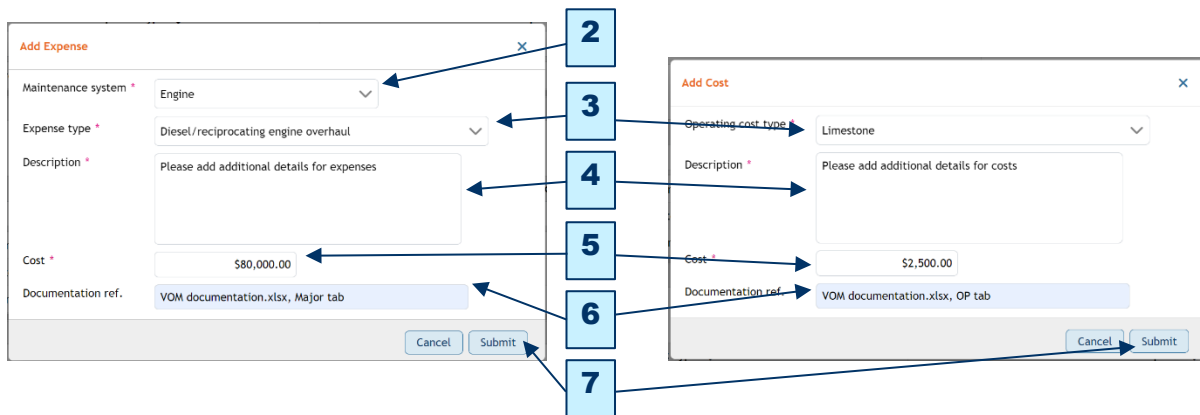


Figure 18. Completed Maintenance Expenses and Operating Costs Example

2023 Cost Details
Do not include any fixed costs or any costs that are already included in the Avoidable Cost Rate template.

Major Maintenance Costs Add Expense

Actions	Maintenance System	Maintenance Expense Type	Description	Cost
	Gas/Combustion turbine	Turbine blade repair/replacement	Please add additional details for expenses	\$50,000.00
	Engine	Diesel/reciprocating engine overhaul	Please add additional details for expenses	\$80,000.00
Total				\$130,000.00

Minor Maintenance Costs Add Expense

Actions	Maintenance System	Maintenance Expense Type	Description	Cost
	Condenser	Repair and replacement of condenser components	Please add additional details for expenses	\$4,500.00
	Cooling towers	Cooling tower fan motor and gearbox inspection	Please add additional details for expenses	\$2,000.00
	Transformers	Repair and replacement of transformers	Please add additional details for expenses	\$10,000.00
Total				\$16,500.00

Operating Costs Add Cost

Actions	Operating Cost Type	Description	Cost
	Limestone	Please add additional details for costs	\$2,500.00
	Water	Please add additional details for expenses	\$1,500.00
	Ammonia	Please add additional details for costs	\$1,000.00
Total			\$5,000.00

Expenses/Costs can be edited by clicking on the **pencil** icon in the Actions column or deleted by clicking on the **trash can** icon in the Actions column (Figure 18). **Use the trash can icon with caution, because the tool will not confirm your decision to delete before removing the record.**

Enter Historic Costs and Operating History

After entering the previous year's detailed costs, you will have to enter the operating history for the previous year, as well as the total expenses and operating history for the 10-year or 20-year period selected (Figure 19).

Notes:

- **Unless a unit has been operational for less than 10 years**, the operating history should be entered for all 10 or 20 years, irrespective of unit ownership during that period. Operating history data can be found in GADS.
- **Only expenses/costs for which documentation exists should be entered.** If there is no documentation, or simply no expenses, for a particular year, enter \$0 in the Annual Dollars field, but still populate the Operating History field (see Figure 22).

1. First, select the desired time period for the historical data. Note that if you select 20 years, the table will not change size, but you will get a scroll bar on the right side of the table enabling you to view all of the rows.
2. To enter data for individual years, click the **pencil** icon in the Actions column at the left of the table. First, enter the operating history for the most recent year and then enter total dollars and the operating history for the rest of the time period.

Figure 19. Total Historical Costs

The screenshot displays the 'Total Historical Costs' interface. On the left, there are three summary tables: 'Total Major Maintenance Costs', 'Total Minor Maintenance Costs', and 'Total Operating Costs'. Each table has a 'Maintenance period' dropdown set to '10 years' and a list of years from 2014 to 2023. The 'Total Major Maintenance Costs' table is the largest and has a 'Maintenance period' dropdown set to '10 years' (labeled 1). Below this dropdown is a table with columns 'Actions' and 'Year'. The 'Actions' column contains pencil icons (labeled 2) for each year from 2014 to 2023. To the right of this table are input fields for 'Operating History (MWh)' and 'Operating History (perMWh)'. The 'Operating History (MWh)' field has a value of 0.000. The 'Operating History (perMWh)' field has a value of 0.000.

After you click the **pencil** icon for the desired year, fill in the total annual dollars and the operating history for that year (Figure 20). For the most recent year, the Annual Dollars field will be pre-populated from the data already entered above.

Click **Submit** when you are finished and repeat for all years in the operating history, as well as for each component of your VOM adder (major, minor, operating cost). If the unit of measure (for example, \$/MWh) is the same for two or more components of the VOM adder, please ensure that the operating history (for example, MWh) matches between them for each year in the history. The tool will not populate/validate this for you.

While this part of the process may seem tedious, it will only need to happen when creating a submission from a blank form. Because the information will be stored in a database, in subsequent years, the previous submission can be pulled up and added to. An example can be seen in **Figure 21**.

Figure 20. Edit Total Maintenance/Operating Cost Form

The figure shows two side-by-side form windows. The left window is titled "Edit Total Maintenance Cost" and the right is "Edit Total Operating Cost". Both have a close button (X) in the top right corner. Each form contains the following fields:

- Year:** 2023
- Annual dollars (\$) *:** Input field with value \$130,000.00 (left) and \$5,000.00 (right).
- Operating history (MWh) *:** Input field with value 10,000.000 (left) and 250,000.000 (right).

At the bottom of each form are "Cancel" and "Submit" buttons.

Notes:

- For plants with multiple units of the same technology type, enter the sum of Annual dollars and the sum of the Operating histories across all of the units.
- Historical data can be found in previously submitted VOM templates, if needed. While the VOM SharePoint site has been retired, market sellers can still access templates that they previously submitted.
- Due to data confidentiality concerns, if a unit changes ownership, the new owner will have to procure historic maintenance records and VOM submittals from the previous owner. PJM cannot provide that information to the new owner or allow them to access the previous owner’s submissions.

Figure 21. Create New Submission From Previous Submission Example

The figure shows a "Create New Submission" form with a close button (X) in the top right corner. The "From" field has a dropdown menu open, showing the following options:

- 000317 (Titan - 3 units)
- 000315 (Titan - 2 units)
- 000205 (Panama - Units 1-4)
- Blank form

At the bottom of the form are "Cancel" and "Submit" buttons.

Once you have finished entering data for all of the years in the unit's history, the tool will escalate the historic dollars to account for inflation. It does this based on escalation factors for each year (Figure 23), which can be seen by clicking **View Escalation Index**. Once the dollars are adjusted for inflation, they are summed for a final total. The operating history is not adjusted and is just summed, as seen in **Figure 22**.

Figure 22. Completed Total Major Maintenance Costs Table Example

Total Historical Costs			
Total Major Maintenance Costs			
Maintenance period * 10 years			
Actions	Year	Annual Dollars (\$)	Operating History (MWh)
	2023	\$130,000.00	10,000.000
	2022	\$100,000.00	10,000.000
	2021	\$0.00	10,000.000
	2020	\$0.00	10,000.000
	2019	\$0.00	10,000.000
	2018	\$100,000.00	10,000.000
	2017	\$0.00	10,000.000
	2016	\$0.00	10,000.000
	2015	\$0.00	10,000.000
	2014	\$0.00	10,000.000
	Total	\$389,640.37	100,000.000

Figure 23. Handy Whitman Escalation Index Table

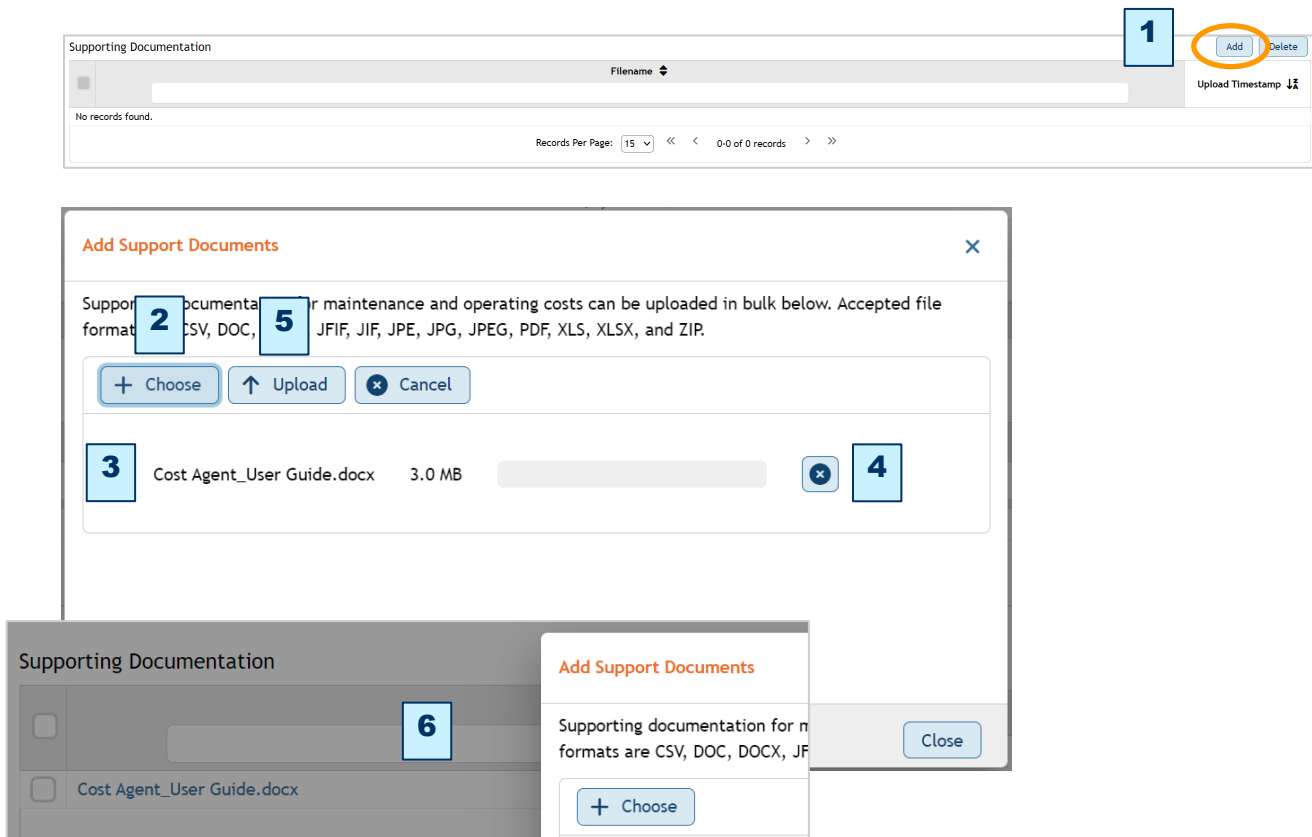
Handy Whitman Table		
Year	Index	Escalation Factor
2024	1061	1.000
2023	1015	1.045
2022	953	1.113
2021	861	1.232
2020	779	1.362
2019	760	1.396
2018	745	1.424

The [Handy Whitman Index](#) can also be found on PJM's website on the Cost Development Subcommittee page.

Add Supporting Documentation

1. To add supporting documentation, click **Add** to the right of the *Supporting Documentation* table.
2. When the *Add Support Documents* box comes up, click **Choose** to select a file from your file system. **Please note the acceptable file types listed in the Add Support Documents box.**
3. Once you have selected the file, it will show up in the *Add Support Documents* box as seen in **Figure 24**.
4. To remove a file that was selected erroneously, click **X** to the right of the file name.
5. Click **Upload** to upload the file.
6. Once the file is done uploading, it will disappear from the *Add Support Documents* box, but it should be visible in the *Supporting Documentation* table as seen in **Figure 24**.
7. Multiple files can be uploaded through this dialog box. Click **Close** when you have uploaded all necessary documents.

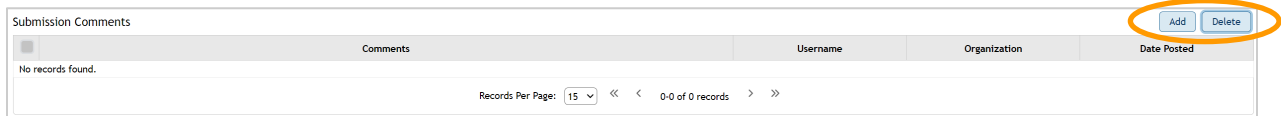
Figure 24. Upload Supporting Documentation



Add Comments

If there is any additional explanation you feel is needed at the time of submission, please enter it in the comments section. To add a comment, click **Add**, and to delete a comment, click **Delete** (Figure 25).

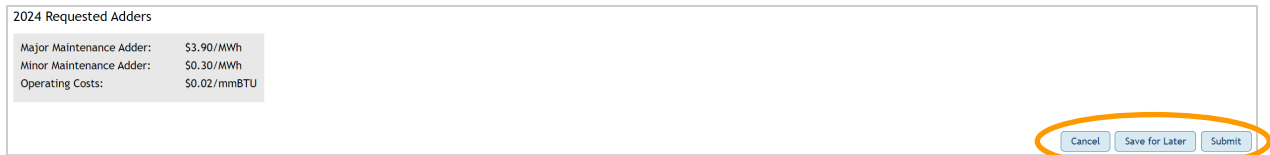
Figure 25. Add/Delete Comments



Review and Submit

Once you have finished entering your data and uploading your documentation, review the proposed adder and click **Submit**. If you have not finished the submission and wish to come back to it later, you can click **Save for Later**. Lastly, if you wish to cancel the submission, you can do that here too by clicking **Cancel** (Figure 26).

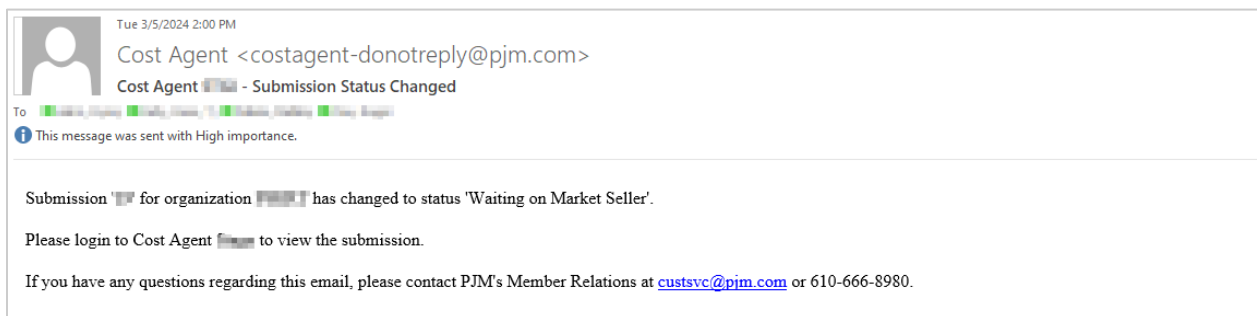
Figure 26. Review and Submit



Review Process

Once you have submitted all of your information, the submission will enter “Submitted” status. At this time, PJM will begin their review of the submission. Once PJM begins their review, the status will be updated to “Under PJM Review.” You will receive an email notifying you when the status of the submission changes (Figure 27).

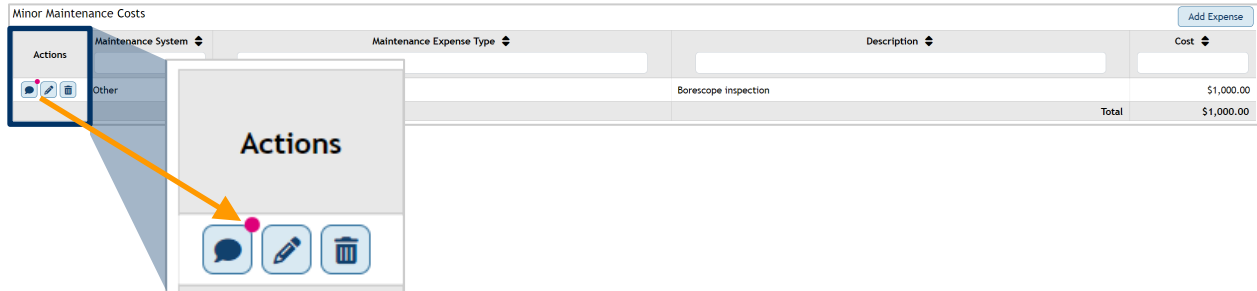
Figure 27. Submission Status Changed Example Email



Responding to Comments

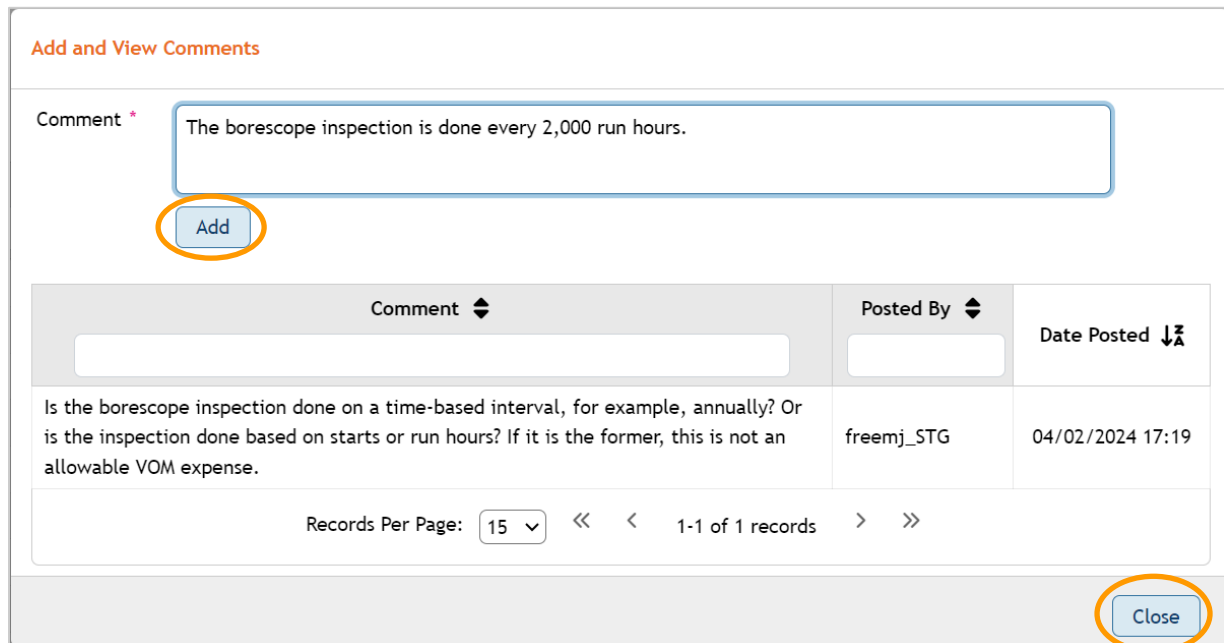
If, upon completing their initial review, PJM has comments or questions about any of the individual maintenance expense or operating cost items, or questions about the submission in general, the status of the submission will be changed to “Waiting on Market Seller.” You will receive an email notification regarding the status change, and you will see a pink dot on the Comment icon in the Actions column for the row(s) for any item(s) in question (Figure 28).

Figure 28. Line-Item Actions and New Comment Indicator Example



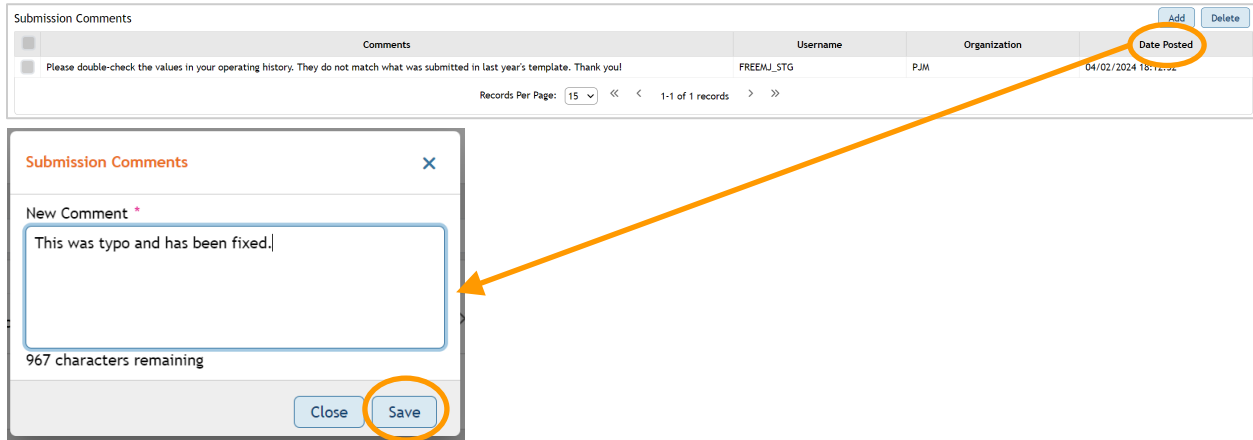
To view the comment(s), click the **Comment** icon. The *Add and View Comments* box will come up (Figure 29). Here, you can view a comment entered by PJM and add a new comment to respond to the question/comment. Click **Add** when you have finished your comment. You can add multiple comments before closing the dialog box. When you are finished adding comments, click **Close**.

Figure 29. View a Line-Item Comment and Add a New One



In addition to comments on specific line items, PJM may add comments to the general submission. You can respond to these comments by clicking **Add** and adding a new comment. Click **Save** when you are finished (Figure 30).

Figure 30. Add a General Submission Comment



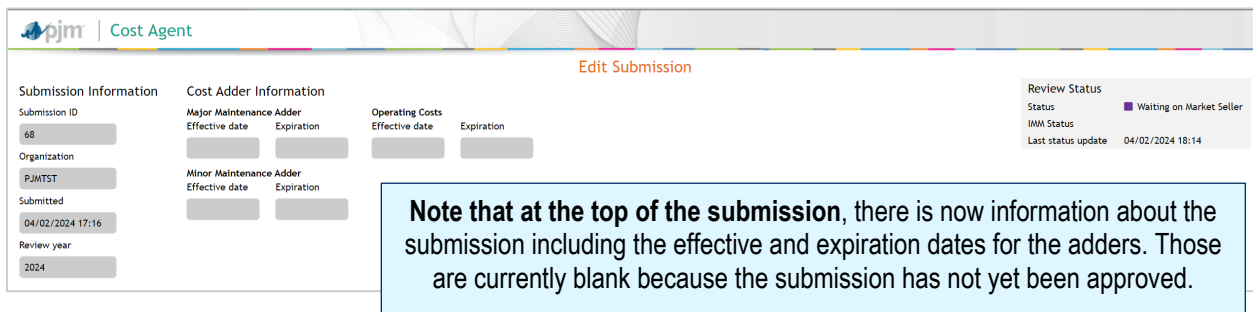
Editing the Submission

In addition to responding to comments, when the submission is in the “Waiting on Market Seller” status, the market seller can also edit the submission (Figure 31).

You can:

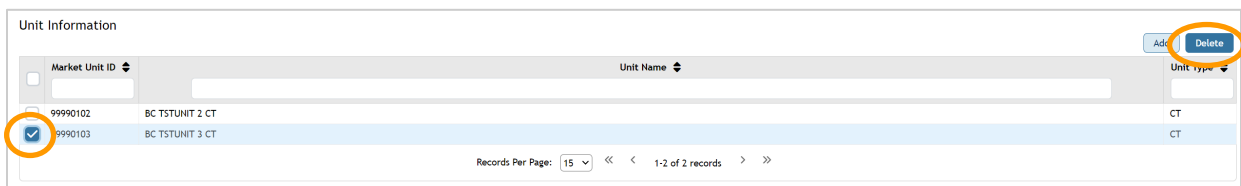
- Add or remove units (Figure 32)
- Add, edit or remove expense and cost items
- Edit values in the Total Historical Costs tables
- Cancel the submission

Figure 31. Edit Submission Page



As when creating a new submission, use the **Add** button and select the unit from the drop-down list to add units to the submission. If a unit needs to be removed from the submission, check the box for that unit and then click **Delete**.

Figure 32. Add or Remove Units



From the Actions column, the market seller can also edit the information about a current expense/cost line item by clicking on the **pencil icon**, or delete a line item by clicking on the **trash can icon**.

Use caution with the trash can icon, because the tool will not confirm your choice to delete.

Additionally, data in the Total Historical Costs table(s) can also be edited by clicking on the **pencil icon** in the Actions column; however, rows cannot be deleted from this table.

When you are finished responding to all of the PJM questions/comments and making any other necessary edits to the submission, scroll to the bottom of the page and click **Submit**. The submission status will change to “Re-Submitted.” This will prompt PJM to reexamine the submission. To cancel the submission, simply click **Cancel**.

Submission Approval

When the submission has been approved by PJM, you will receive an email notification. Additionally, on the main page, the status submission will be set to “Approved,” and the approved adder values will be shown. Last, you can click the **Submission ID** to view the effective and expiration dates for each of the adders (Figure 33).

Approved adders should not be included in the cost offer until the effective date!

Figure 33. Approved Submission

The screenshot shows the PJM Cost Agent interface. The top part displays a table of submissions with columns for Submission ID, Submission Alias, Number of Units, Company Name, Review Year, Major Maint. Adder, Minor Maint. Adder, Operating Cost Adder, Submitted, Status, Status Updated, and Reviewer. A submission with ID 68 is highlighted, and an arrow points to its ID. Below the table, the detailed view for submission 68 is shown, including Submission Information (ID: 68, Organization: PJMTST, Submitted: 04/02/2024 17:16, Review year: 2024) and Cost Adder Information (Major Maintenance Adder: Effective date 1/1/2025, Expiration 12/31/2028; Minor Maintenance Adder: Effective date 1/1/2025, Expiration 12/31/2025). The Review Status is shown as Approved with a green checkmark. An 'Edit Submission' link is also visible.