TO Planner (M3 Planner) User Guide

Date 4/19/2024

For Public Use

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Contents

Overview

The TO Planner (M3 Planner) was created to allow Transmissions Owners to submit M3 supplemental projects (Needs, Solutions, and Local Plan) to PJM through a web portal. Transmission Owners are able to track their submitted project status and interact with PJM transmission planning through the web portal.

Account Administration

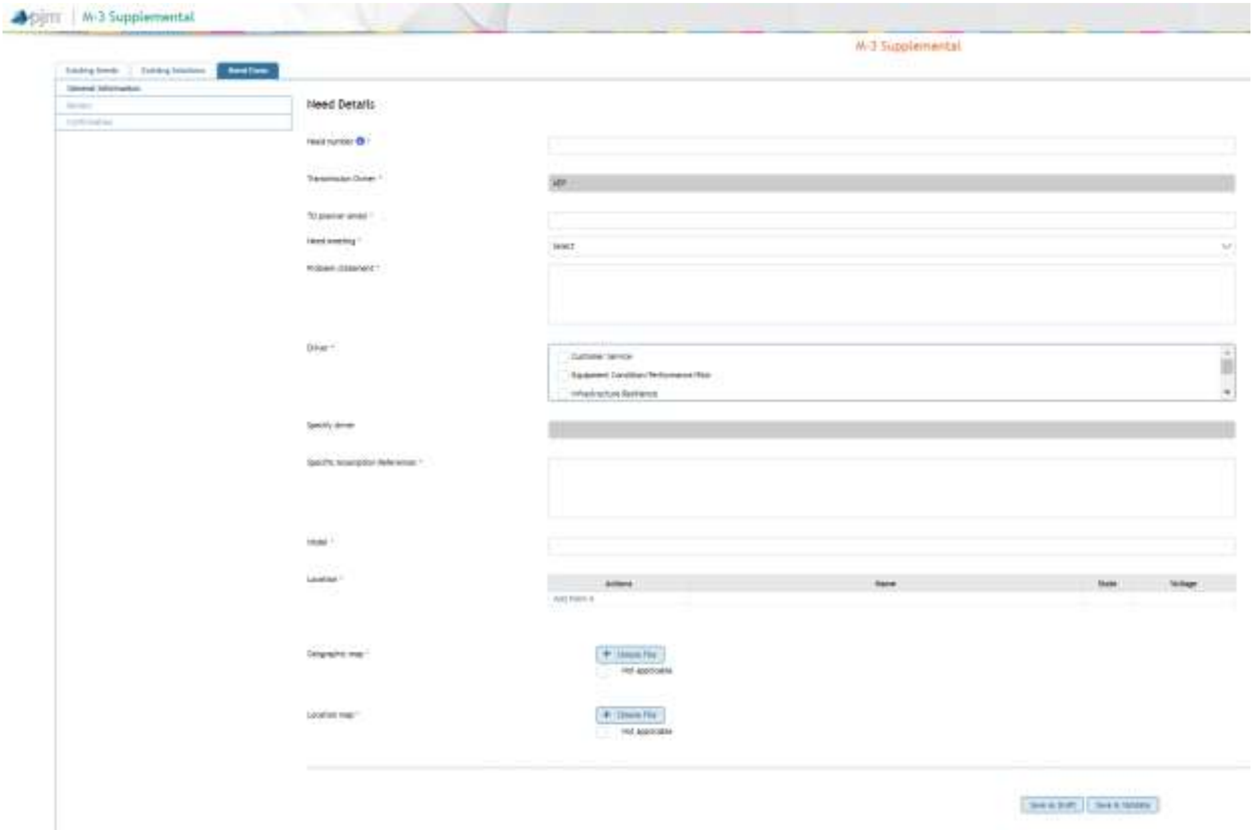
Users must request access for the PJM.com TO Planner tool via the Account Manager (https://accountmanager.pjm.com/accountmanager/) page. If you already have access to the TO Planner Non-Competitive Baseline Tool, then the access for M3 Planner should already be granted on your account.

Homepage

The [TO Planner](#) M-3 Supplemental homepage displays all of the Needs that a Transmission Owner has entered. For the existing Needs listed, it will display the Need ID, Need Date, Solution Date, the Supplemental ID if available, the Local Plan Date if available, the Region, and the Status. Under the Actions column, users are able to view /edit/remove/request to cancel the Submission. Depending on the status of the submission, different actions are allowed.

Creating a New Need Submission

Clicking on the “Create New Submission” button on the homepage brings the user to the Project Submission Form. The fields marked with a red (*) are required fields. Users can save the progress anytime during the process by click “Save as Draft”. TOP will show saved information when the user log in next time. The General Information tab has to be saved (either “Save as Draft” or “Save & validate”) before the remaining tabs are open for completion. Note: The save status of each tab is shown on the upper right corner of the tab.



General Information

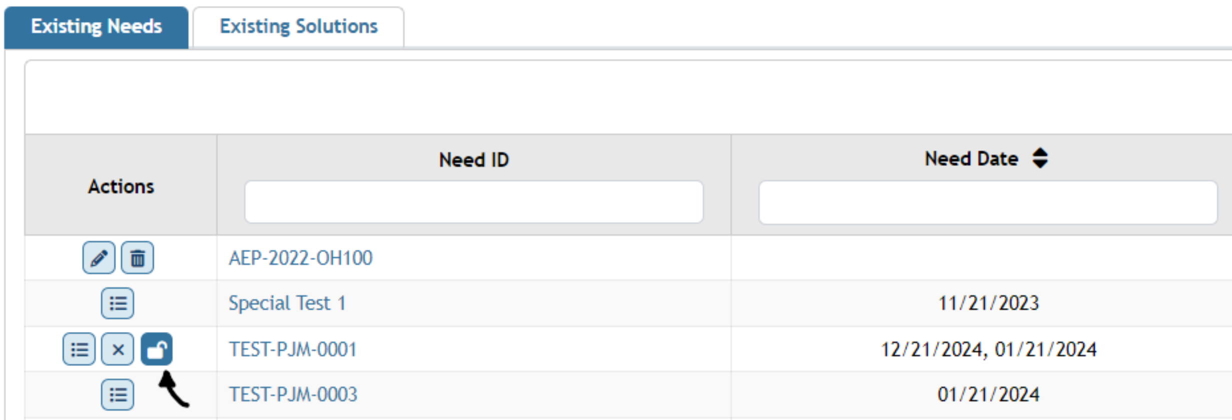
Going down the list in the General Information page, there are the following items.

1. Need Number: This must be unique and should adhere to the following pattern: TO-Year-LettersNumbers.
2. Transmission Owner: This will be auto populated depending on the TO you are registered with.
3. TO Planner email: The email of the TO Planner who is responsible for the project planning study.
4. Need Meeting: A drop down selection of upcoming SRRTEP/TEAC dates to choose from
5. Problem Statement: A description of the problem/violation(s) that the upgrade is intended to resolve
6. Driver: The Type of study showing the need for project.
7. Specific Assumption References: TO defined assumptions on how analysis is performed
8. Model: The case year the issue was identified.
9. Location: A list of points that can be accessed where the project is taking place. Users can also add a new point if their location is not listed.
10. Geographic Map: A geographic map showing the location of the upgrade including map legend and small locator map (see the sample below). If there is none, please check the “Not Applicable” box.

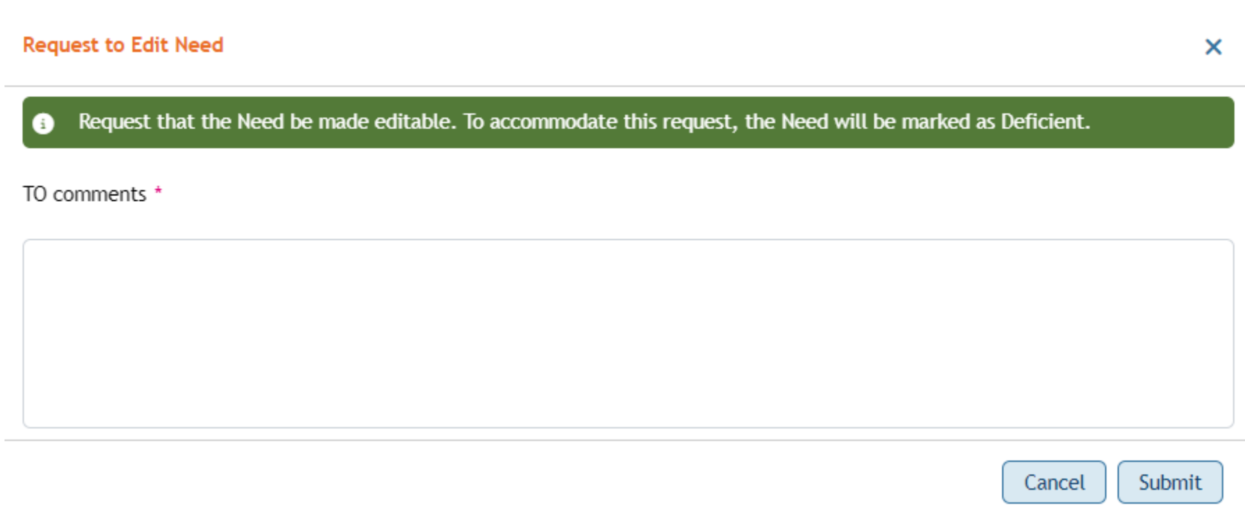
11. Location Map: An indicator of the location of the project in a PJM Scale Map

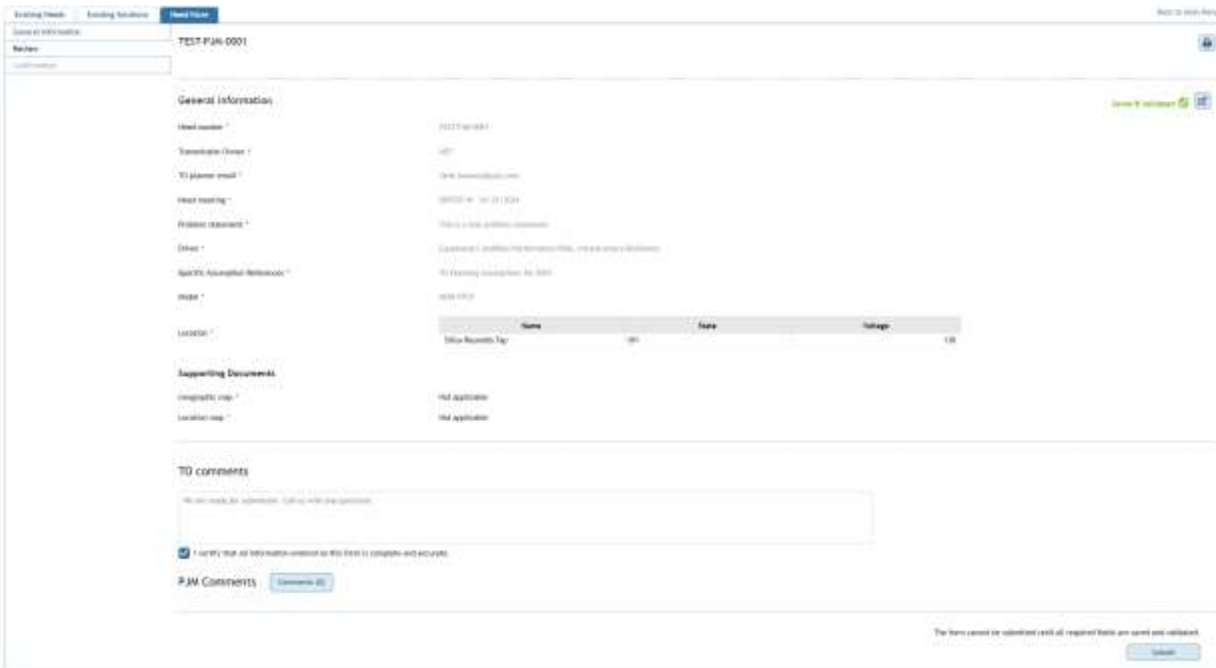
Users are then prompted on the bottom of the page to “Save as Draft” and “Save and Validate”. “Save as Draft” will allow users to continue on with the submission form and fill out the rest of the data required. This includes a comment section for TOs to add any questions or action items for PJM. “Save and Validate” will confirm that the information provided is correct and is a required step in which will be discussed further in the “Review” tab.

Once completed, Users are then able to access the “Review” tab where the information entered above can be confirmed to submit. The form is unable to be submitted until all the required fields are saved and validated. Once the Need is submitted, it is locked for external editing till PJM issues a deficiency. TO can send a “request for edit” and PJM will issue a deficiency based on the request.



Clicking the “Unlock” symbol will identify being the “Request to Edit Need” process, where TO will need to leave a comment as to what needs to be updated. For PJM to accommodate the request, the need will be marked as Deficient until the items are updated.



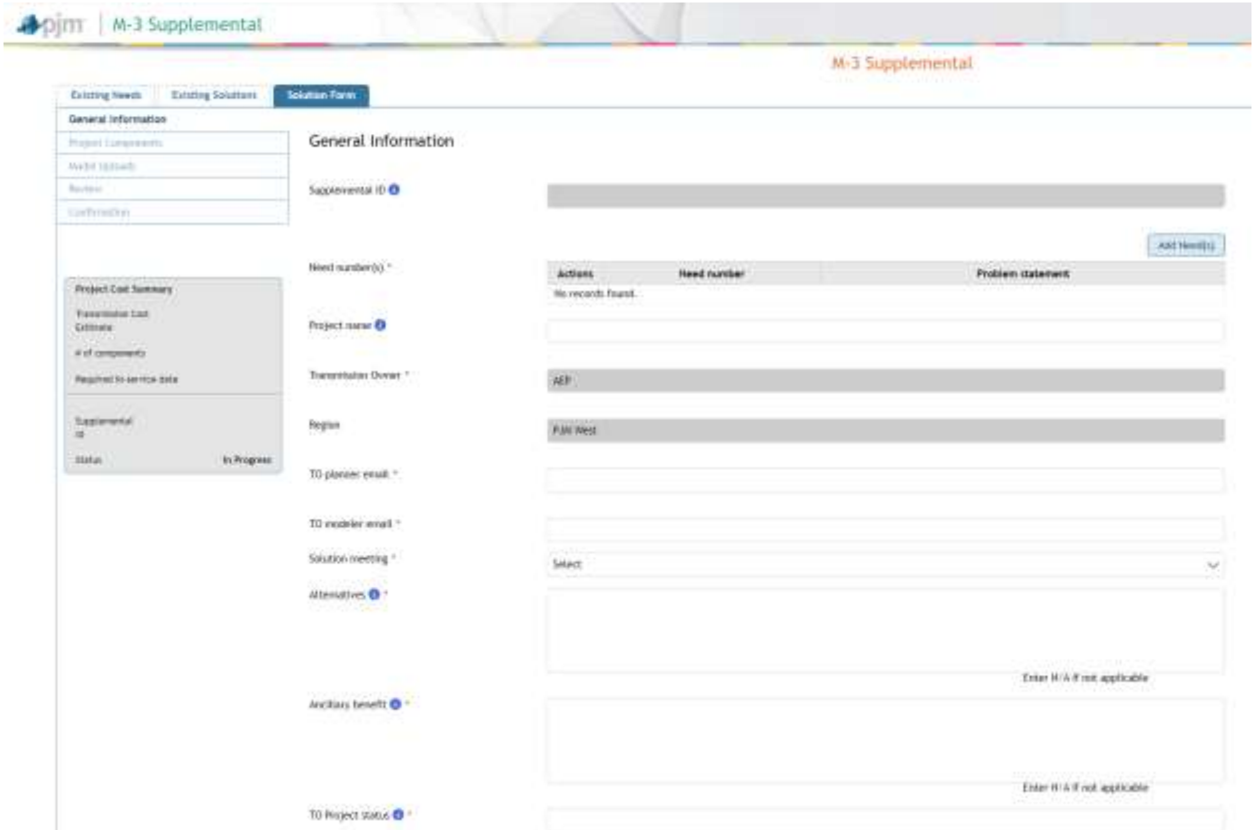


Creating a New Solution Submission

Clicking on the “Create New Solution” button on the “Existing Solutions” homepage brings the user to the Project Submission Form. The fields marked with a red (*) are required fields. Users can save the progress anytime during the process by click “Save as Draft”. TOP will show saved information when the user log in next time. The General Information tab has to be saved (either “Save as Draft” or “Save & Validate”) before the remaining tabs are open for completion. Note: The save status of each tab is shown on the upper right corner of the tab.

1. Supplemental ID: This is provided by the tool once the project passes DNH study.
2. Need Number(s): Users can select the need from the list of presented needs (double check). Multiple needs can be selected. Only the needs without a solution can be selected. NOTE: Each TO can only selected its own needs. If the solution is also addressing other TOs’ needs, please enter the other TOs’ need into the comment field. PJM will link the solution with all associated needs internally.
3. Project Name: This is the name of the project submitted by the Transmission Owner.
4. Transmission Owner: This will be auto populated depending on the TO you are registered with.
5. Region: The region in which the Project is located (PJM South, PJM West, PJM MA).
6. TO Planner email: The email of the TO Planner who is responsible for the project planning study.
7. TO Modeler email: The email of the TO Modeler who is responsible for project MOD Submission.
8. Solution Meeting: Users can select a Solution Date for upcoming SRRTEP/TEAC Meetings and 15 day submittal deadline is considered.
9. Alternatives: A description of the alternatives that the TO has analyzed

10. Ancillary Benefit: Any additional benefits identified beyond addressing the selected needs.
11. TO Project Status: The project status when the TO submits the solution.

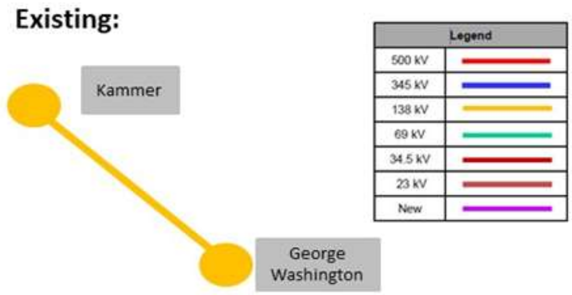


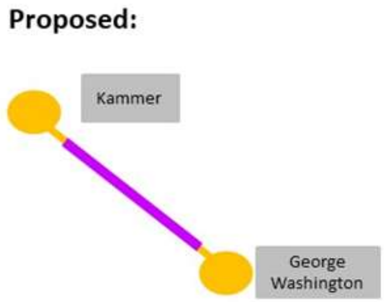
Supporting documents are also required:

1. Geographic Map: A geographic map showing the location of the upgrade including map legend and small locator map (see the sample below). If there is none, please check the “Not Applicable” box.

2. Location Map: An indicator of the location of the project in a PJM Scale Map

3. Bubble Diagram: Bubble Diagram: A bubble diagram including diagram legend showing the baseline project. If there is none, please check the “Not Applicable” box.

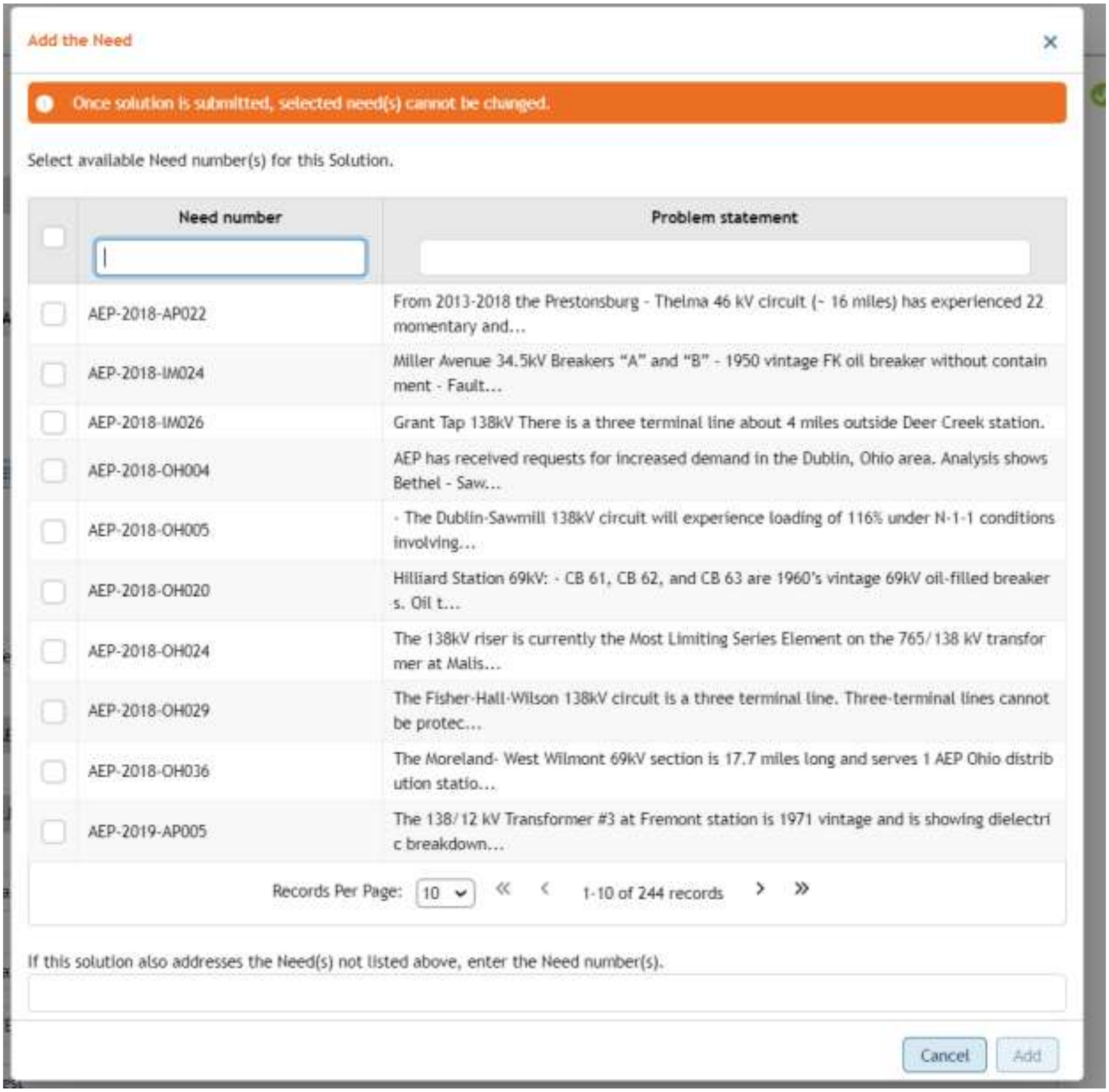




Saving and Validating the page allows the “Project Components” section to open.

Joint Solutions

In the event of a solution that requires components from multiple Transmission Owners, please indicate the Designated Entity for each component. If the solution addresses needs from other Transmission Owner(s) please indicate the Need Numbers from the other Transmission Owner(s) in the comment field in the tool seen below. PJM will link the solution with all of the associated needs internally. Users are recommended to communicate with PJM prior to this solution so that PJM can properly track and identify the Upgrade ID number accurately.

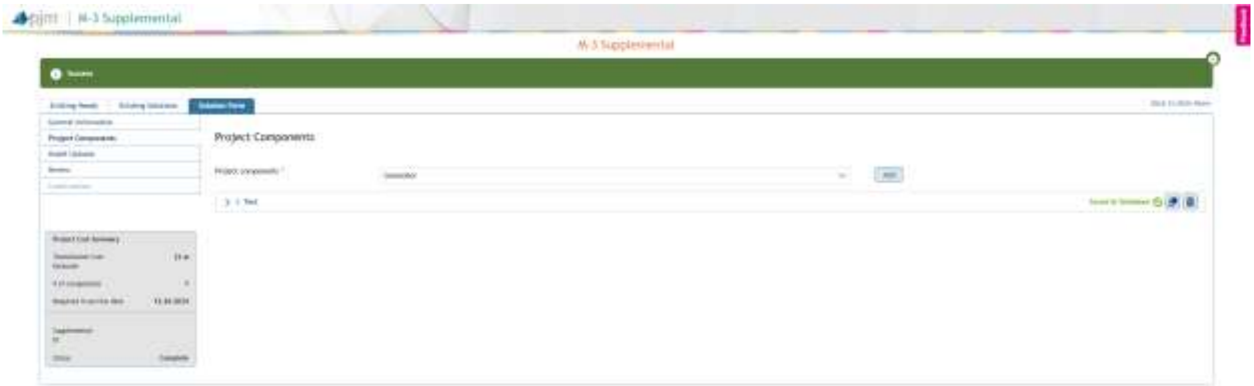


Project Components

There are three types of components:

1. Transmission Line Component
2. Substation Component
3. Generator Component (NOTE: TOs must obtain concurrence from the related generator owner on the scope of the component before submitting it to PJM)

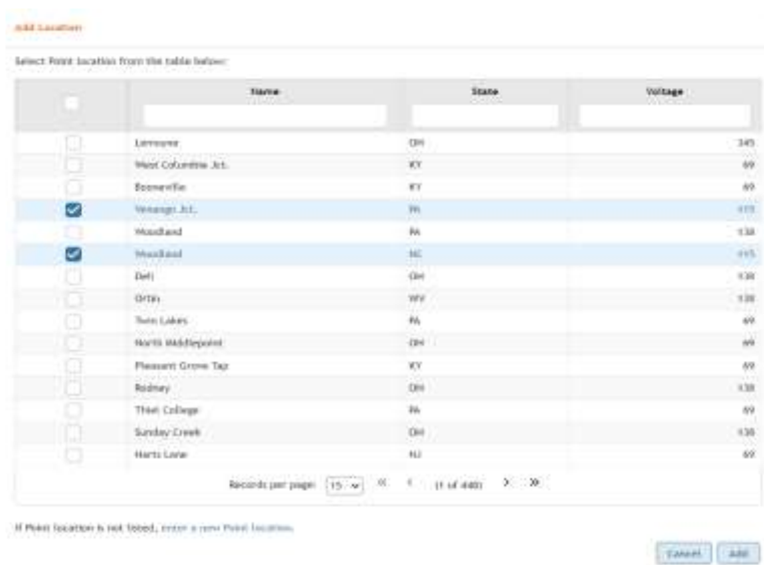
A project can have multiple components (including multiple same type of components).



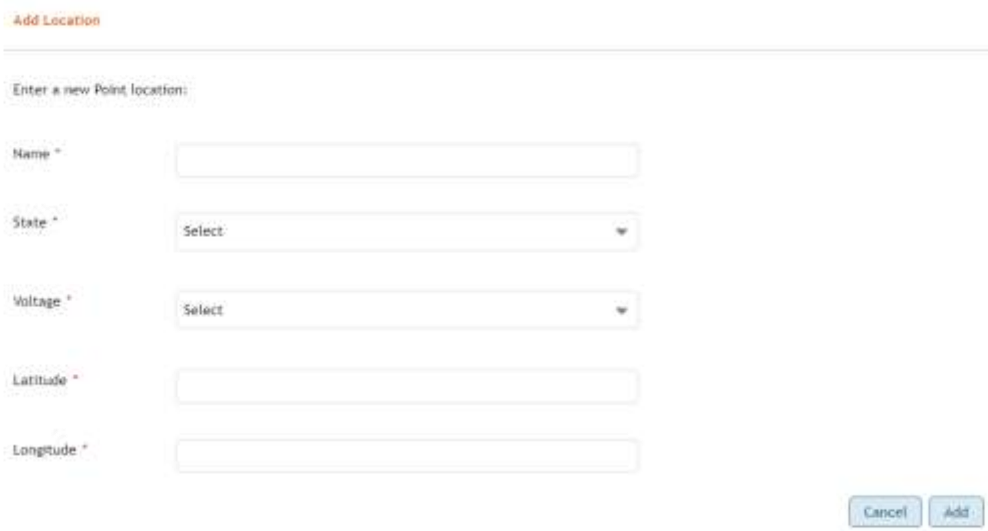
Please note, each of these have their own requirements to fill out and must be “Saved and Validated” at the end of the submission. If you have multiple components, you can add a separate entry by clicking the drop down menu and select “Add”.

Locations

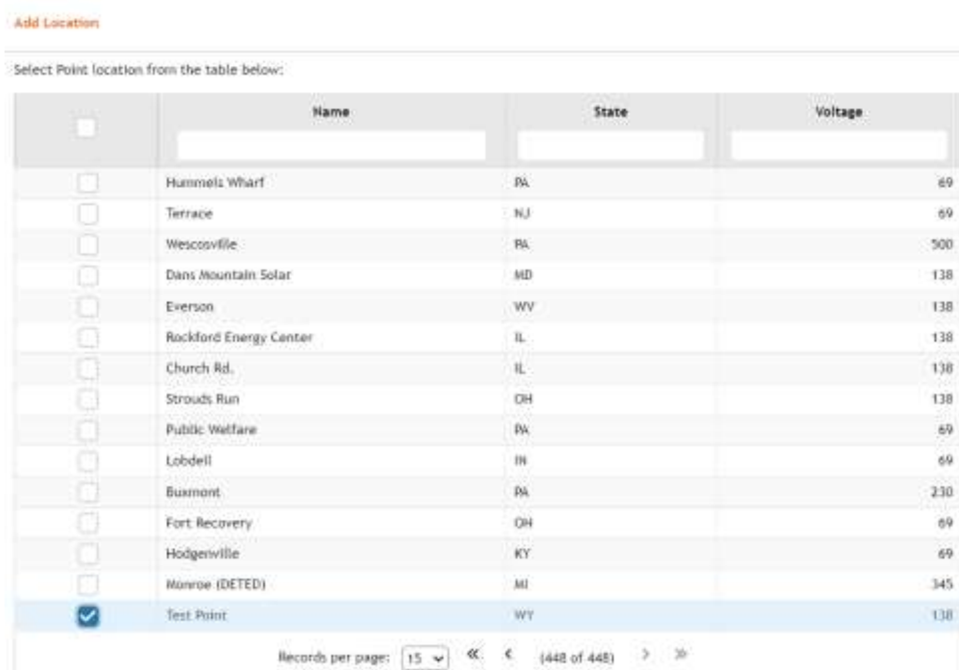
When adding a new component, users will be required to provide the location. For Transmission Line Components, a minimum of Point A and Point B are required. For multi section line, up to 10 locations can be selected. To select points, users can click the box on the left hand side to select the desired location. If more than two locations are selected, the sequence of selection should follows the line arrangement. For example, for line A-B-D-C, the selection sequence should be 1-A, 2-B, 3-D and 4-C.



If the location is a GREENFIELD (doesn’t exist in the location list), then users can select the “enter a new Point Location” and provide the required information that is seen below.

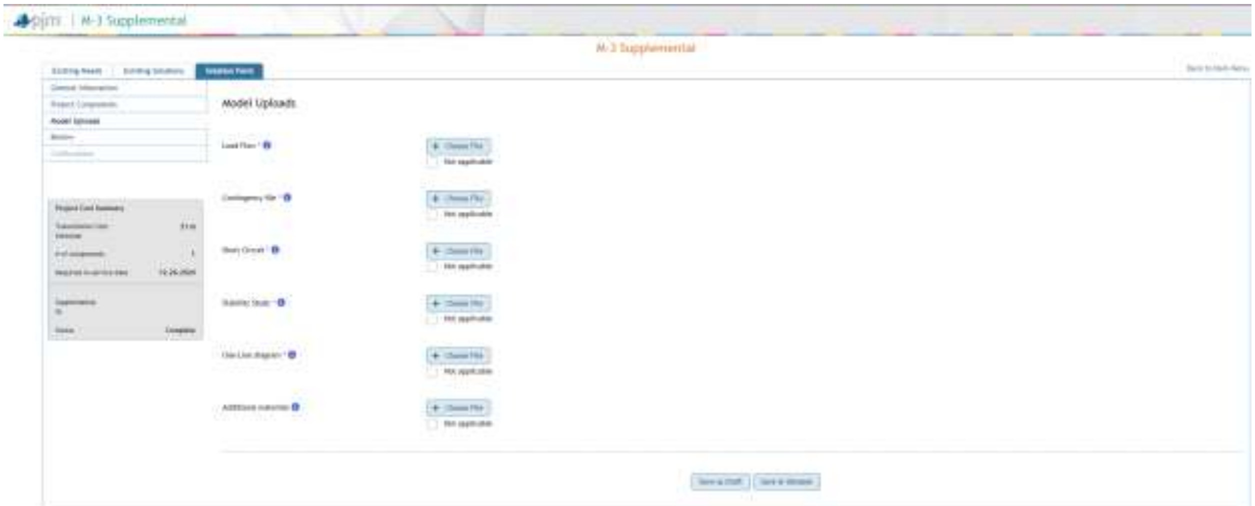


Users can see the added point at the end of the list of available points. Points added in the tool can be used for all components that are added. Please note, once the point is added to the list, it can't be removed unless the component is deleted before the submission. However, it can be deselected. After the project is submitted, Users cannot remove the added point(s) anymore.



Model Uploads

In this section, Users shall upload the Load Flow Files, Contingency Files, Short Circuit Files, Stability Study Files, One Line Diagrams, or any additional materials. If certain files that are required but not applicable, please select the "Not Applicable" box. Make sure to "Save and Validate" when completed.



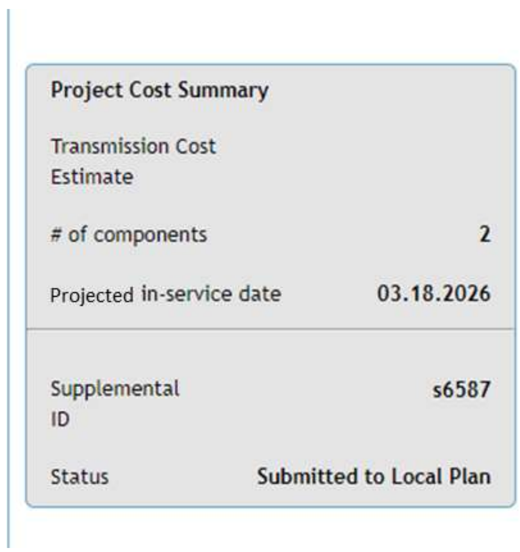
1. Load Flow : The IDV file in the corresponding PSS/E Version
2. Contingency File: New, Removed, and or Updated Contingency definitions
3. Short Circuit: Short Circuit CHF Files
4. Stability Study: Dyr file, or other files needed for stability study
5. One-Line Diagram: One – Line Diagram of the Model
6. Additional Materials: Please include any other files for analysis in this section

Review

The Review tab has all of the prior information that the user entered into the tool. Each section will have a header in the top right corner to note if it was "Saved & Validated". Users will not be able to check the box on the bottom of the page until they have made sure that each section has been "Saved & Validated".

Once the user submits the project, they will see a confirmation banner appear. Please note, once a project is submitted, it can no longer be edited unless PJM marks the project deficient.

On the left hand of the screen, there is a window that summarizes components of the proposal including the "Transmission Cost Estimate", the "Number of Components", and the "Projected In Service Date" Once the project is accepted by PJM, a Supplemental ID will be assigned.



Users are able to edit a project that have not yet been submitted by clicking on the tool listed in the Actions Column. Once the project is submitted, it will be locked for editing unless PJM marks it deficient.

Users can also generate a PDF of the Proposal once it has been submitted by going to the “Review Tab”

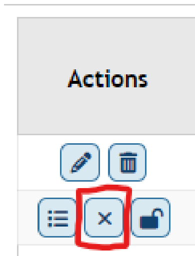
Project Status

Each time a project changes status, TOs will receive an email that indicate the status change. The status of the project indicate where in the cycle it is.

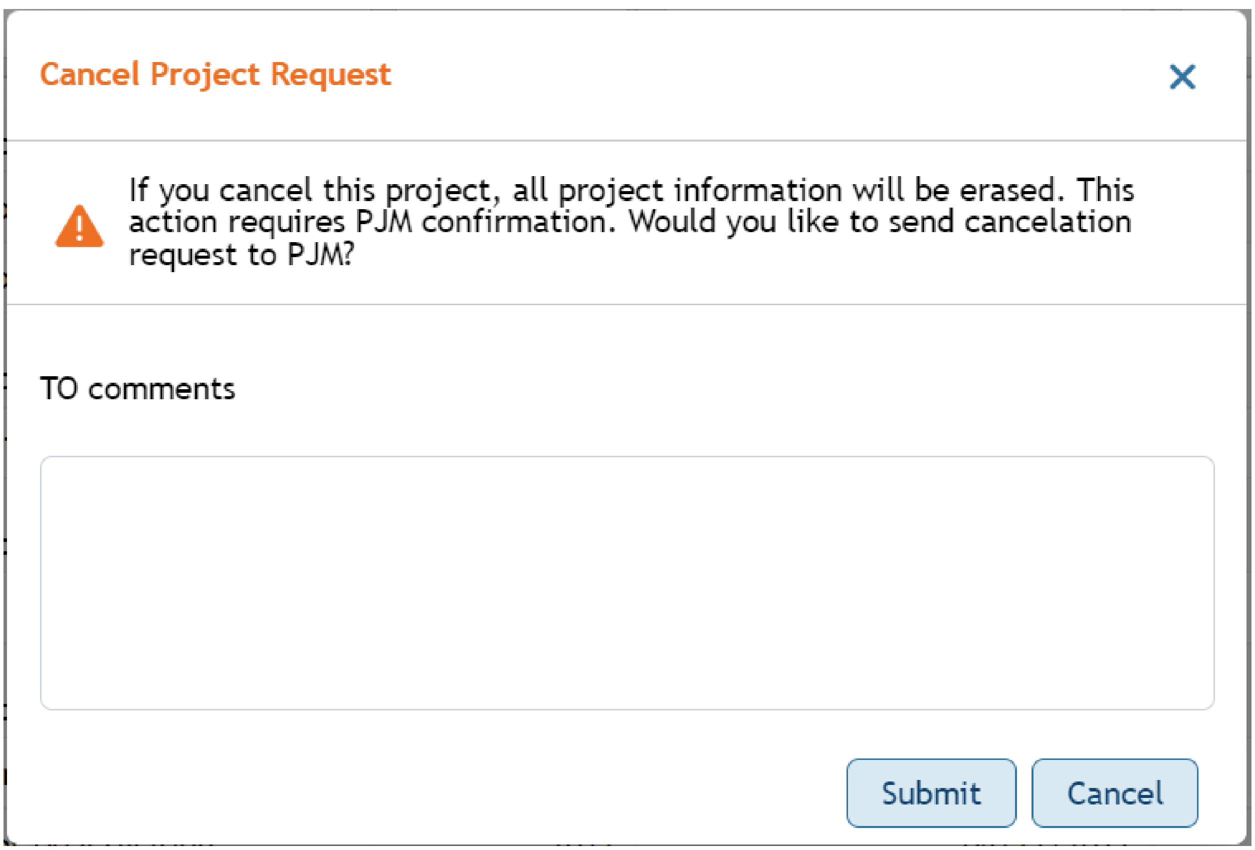
- Accepted: Project has been submitted and is waiting for PJM to begin Review
- Deficient: Project has an item that is marked as Deficient and needs to be addressed
- DNH Failed: Project has failed the Do No Harm Analysis and action is required to correct this
- DNH Passed: Project has pass the Do No Harm Analysis
- DNH In Progress: Project is being studied by PJM
- Under PJM Review: Project has been accepted by PJM and is under the initial review
- Complete: Project has been analyzed and marked as completed by PJM
- Finalized: Project has been finalized and is awaiting to be pushed to the Local Plan
- Submitted to Local Plan: Project has been submitted to the Local Plan

Cancel a Project Submission

TOs can initiate the cancellation of a submitted project by sending a cancellation request. This also works for canceling a project at the needs stage as well. By clicking either the icon on the “Actions” tab in the homepage. PJM will review the request and cancel the submittal.



Users will then be prompted with a request form for the Cancellation of the submission. Generally, TOs should state the reason(s) for the cancellation in the pop up TO comments field. Cancellation of a project submission requires PJM confirmation.



Deficiencies

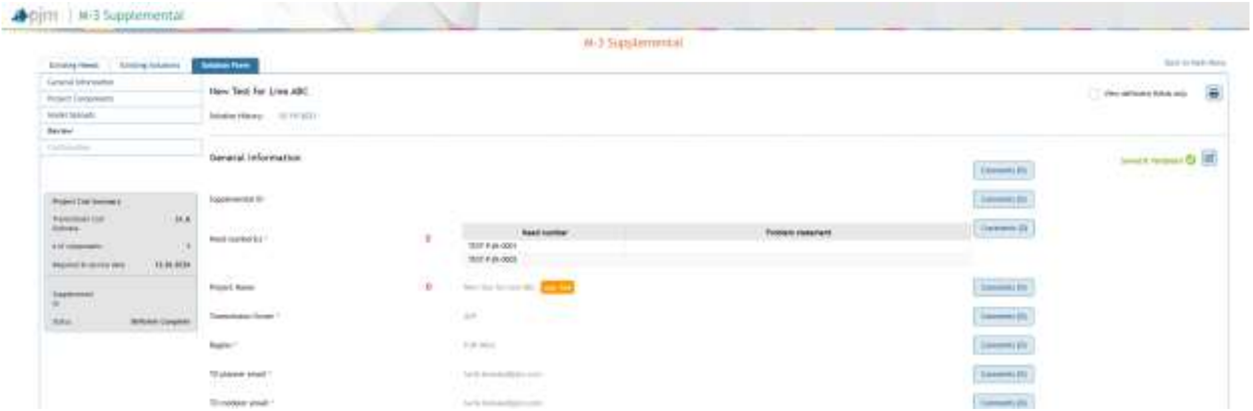
Once a project is submitted, PJM will review all the information submitted. If there is any deficiency in certain field(s), PJM will mark these field(s) of the project Deficient. In some situations, PJM could mark the whole project deficient. In the event of this, Users will receive an email stating that their project has been marked deficient and needs to be reviewed and re-submitted.

To view the deficient fields, open the project and navigate to the "Review" tab. There you will see blue "**D**" marks indicating which fields need to be updated.

Users are only able to edit the fields that are marked as deficient. Users can navigate to the tab that has the deficiency and make the necessary changes.

Users can also select the "View Deficient Fields Only" box to see only what PJM has marked as deficient in their proposal.

All updates made are tracked and will be reflected in yellow on the final review page after they are "Saved & Validated".



Submit to the Local Plan

After checking the status and receiving communication from PJM that a project has passed the Do No Harm study, TOs will have the ability to submit their project to the Local Plan.

By clicking on the project and navigating to the “Review” tab on the “Solution Form”, at the bottom of the page there will be a “Submit to Local Plan”. Clicking this will prompt the user that once submitted to the Local Plan, the solution will no longer be editable. In the event there are edits needed, reach out to PJM.