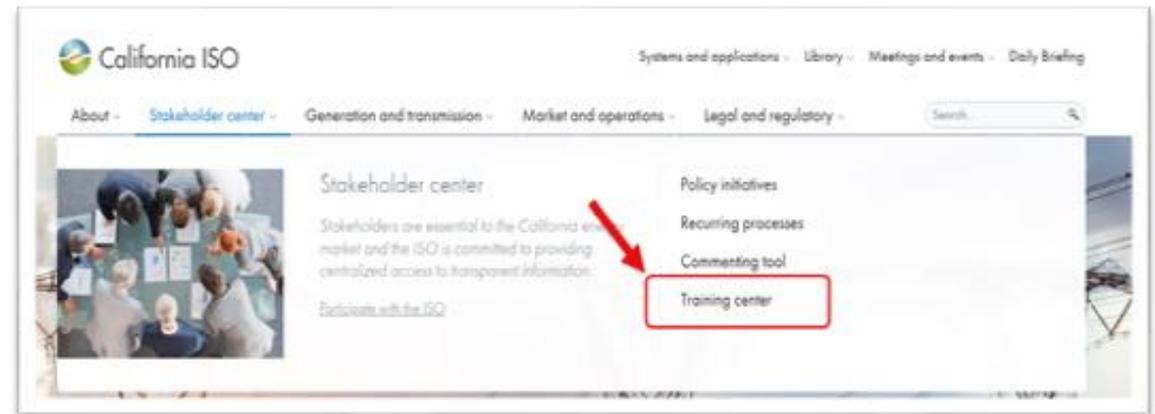


Hybrid Resources Phase 2C – RIMS Pre-Market Simulation Training

Today's Trainer

Dottie Vance
Customer Readiness
Trainer



Housekeeping



REMAIN MUTED

Keep yourself muted to minimize background noise



ASKING QUESTIONS

Unmute to ask verbal questions or write in the chat pod

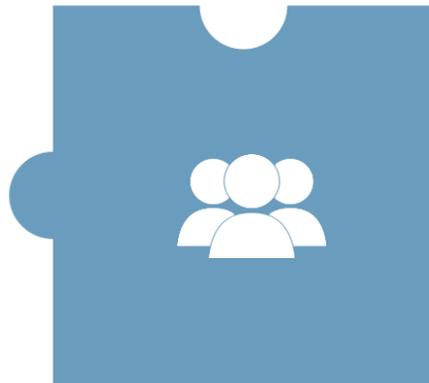
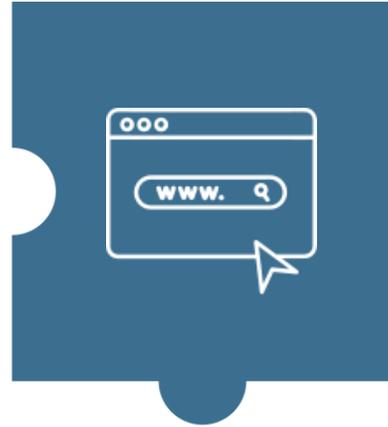
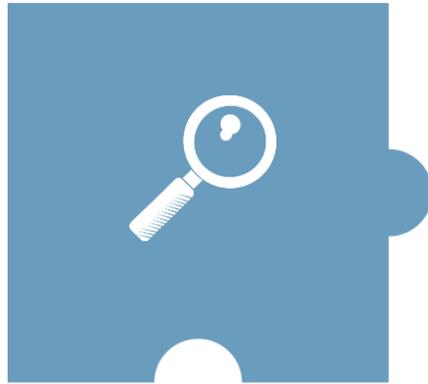


RAISING HAND

Raise your hand using WebEx interactivity tools

The information contained in these materials is provided for general information only and does not constitute legal or regulatory advice. The ultimate responsibility for complying with the ISO FERC Tariff and other applicable laws, rules or regulations lies with you. In no event shall the ISO or its employees be liable to you or anyone else for any decision made or action taken in reliance on the information in these materials.

Training Agenda



SUMMARY

Review who is impacted and the upcoming project timeline.

NEW COLUMN - COMPONENT ID

Learn the purpose and application of the new Component ID column in Resource Interconnection Management System (*RIMS*).

NEW RIMS WEB FORM

Understand how to fill out and meet requirements for the new Site Information web form.

REQUIREMENTS FOR DOCUMENTS

Walkthrough the different documents required for a Solar and/or Wind project (*e.g., TopoMap, Shapefile, Sharing Agreement*).

MARKET SIMULATION & WRAP UP

Review your role in market simulation tasks within RIMS and the action items from today's training.

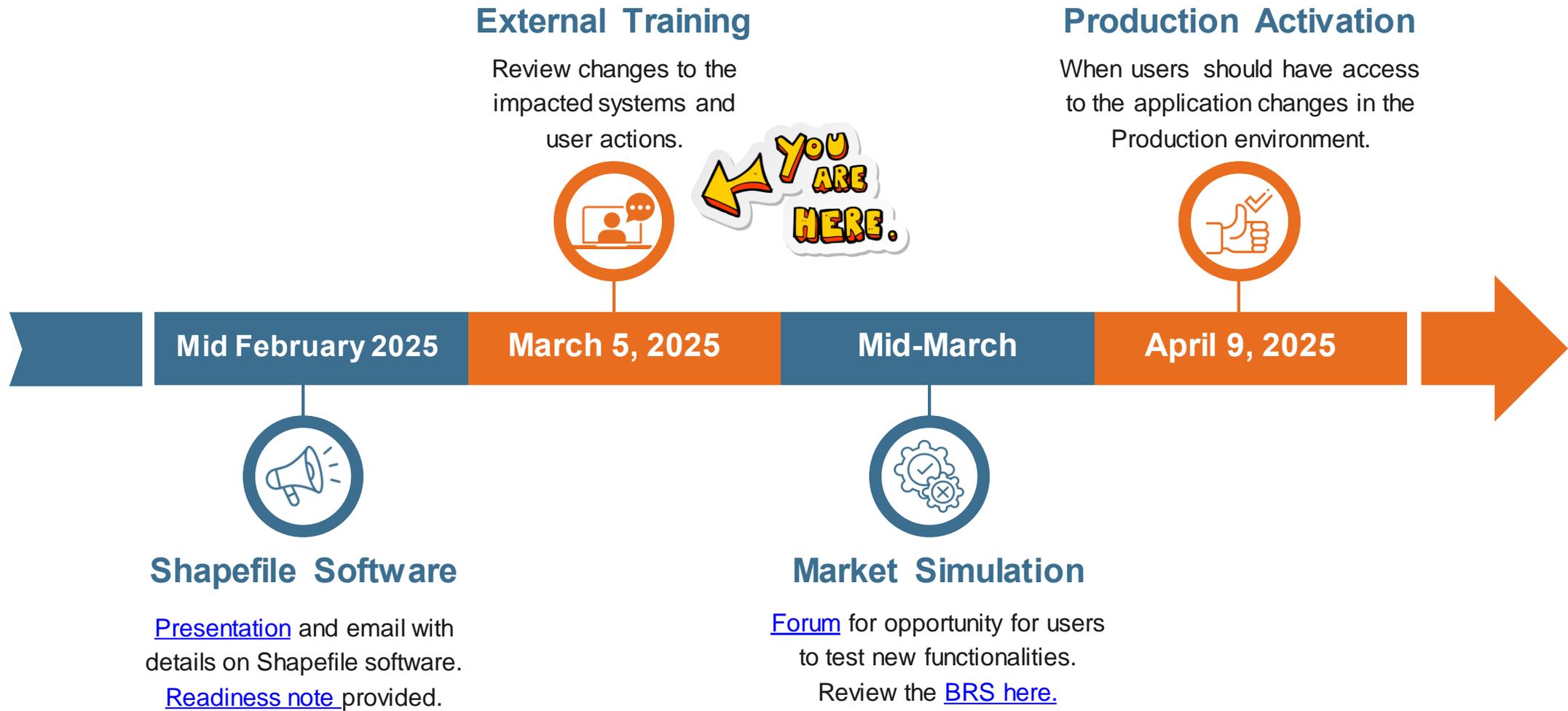
Who does this impact?

Resource Owners that participate in the New Resource Implementation (NRI) process. Specially those that are:

- Will eventually add a new resource
- Are currently onboarding a resource
- Project type that has a Wind and/or Solar Component



Timeline of Project



Let's review the key features of the...

NEW COLUMN COMPONENT ID



Navigating in RIMS – Project View

Navigation: Market Participant Portal (MPP) > RIMS > MPAI > MPAI Dashboard > All Active > View button

The screenshot shows the RIMS interface. At the top, the navigation menu includes 'Global Dashboard', 'App & Study', 'MPAI' (highlighted with a red box and a circled '1'), and 'Reporting'. Below this, the 'MPAI Dashboard' section has 'All Active' (highlighted with a red box and a circled '2'), 'Meter and Real-Time Device', and 'Canceled' buttons. The main area is titled 'MPAI Project Dashboard - All Active' and contains a table with columns: MPAI Project Status, MPAI Process Status, Type, PTO, Project Name, Equipment Type, Equipment List, Project Key, Resource ID, Queue Number, Implement Date, Target/COD Date, Projected Model, DBModel, MPAI Comments, HyperLink, Doc Count, Previous Date, Status, and a 'View' button. The table has three rows. The second row is highlighted, and its 'View' button is circled with a red '3' and an arrow pointing to it. The table also includes a pagination bar showing '1 - 25 of 1427' and a 'GO' button.

MPAI Project Status	MPAI Process Status	Type	PTO	Project Name	Equipment Type	Equipment List	Project Key	Resource ID	Queue Number	Implement Date	Target/COD Date	Projected Model	DBModel	MPAI Comments	HyperLink	Doc Count	Previous Date	Status	View
On Track	In Process															1	10/04/2017	IN PROGRESS	View
On Track	In Process															3	05/01/2019	IN PROGRESS	View
Change	In Process															4	01/01/2018	IN PROGRESS	View

The process for navigating to projects in RIMS will remain the same. There are no User Interface (UI) changes until we get into the project view.

General Project Information – New Column for Component ID

RIMS > MPAI > MPAI Dashboard > All Active > View button > General Project Information

General Info

Generation Project Name:

Project Type:

Project Description:

IA Type:

Project Status:

Resource ID:

Assigned Point of Delivery:

PTO:

Nameplate(MW):

Nearest(60kV) Substation:

Point of Interconnection:

Distributed Resource Type:

Baseline Methodology:

Sublap:

Distribution:

Pnode:

Generation Distribution Factor:

Phase Status:

QM Limited Operations:

Connection Voltage:(kV)

DB Model Info

ISO Project Num: 19AS8974

Assoc With:

Projected Model: 25M5

Assigned Model:

DB Model Date (MM/DD/YYYY):

Email Notification:

Contact Info

Contact Name:

Contact Phone Number:

Email Address: (semi colon seperated)

Resource Address and Phone Number

Street Address:

City:

County:

State:

Zip Code:

Latitude(cal):

Longitude(cal):

Control Room Phone#:

Megawatt By Fuel Type

Configuration Type:

Fuel Type and Megawatt						
Fuel Type Index	Fuel Type	COMPONENT ID	Net MW	MWh	PMin	Forecast Election
Fuel 1	Battery		5			CAISO
Fuel 2	Solar	SOLR1	5			CAISO
Fuel 3	Wind	WIND1	5			CAISO
Fuel 4	[None]					

Understanding Component IDs

- Only for Configuration Types Hybrid or Hybrid & Co-located.
- Component IDs are system generated unique identifiers for Wind and Solar fuel types only.
- Users can edit the User Interface (UI) to different fuel types.
- If users re-add a Wind/Solar fuel type, the Component ID will change to a new identifier.

Megawatt By Fuel Type

Configuration Type: Hybrid & Co-located

Fuel Type and Megawatt						
Fuel Type Index	Fuel Type	COMPONENT ID	Net MW	MWh	PMin	Forecast Election
Fuel 1	Wind	WIND1	5			CAISO
Fuel 2	Solar	SOLR1	5			CAISO
Fuel 3	Wind	WIND2	5			CAISO
Fuel 4	Solar	SOLR2				

Example – Component ID Naming Conventions

Megawatt By Fuel Type

Configuration Type: Hybrid & Co-located

Fuel Type and Megawatt

Fuel Type Index	Fuel Type	COMPONENT ID	Net MW	MWh	PMin	Forecast Election
Fuel 1	Wind	WIND1	5			CAISO
Fuel 2	Solar	SOLR1	5			CAISO
Fuel 3	Wind	WIND2	5			CAISO
Fuel 4	Solar	SOLR2				

COMPANY A

Project Details form indicated their project would have four fuel types two Wind and two Solar.

Realized, they'd like to change a fuel type (*and they can do so via the UI in RIMS!*)

Example – Component ID Naming Conventions Cont.

Megawatt By Fuel Type

Configuration Type: Hybrid & Co-located ▾

Fuel Type and Megawatt

Fuel Type Index ▲	Fuel Type	COMPONENT ID	Net MW	MWh	PMin	Forecast Election
Fuel 1	Battery		5			CAISO
Fuel 2	Solar	SOLR1	5			CAISO
Fuel 3	Wind	WIND2	5			CAISO
Fuel 4	Solar	SOLR2				

COMPANY A

Via the RIMS UI, they were able to change the Fuel Type to Battery.

Battery is not Wind/Solar so no Component ID.

Oh no... they just realized it actually should have been Wind!

Example – Component ID Naming Conventions Cont.

Megawatt By Fuel Type

Configuration Type: Hybrid & Co-located

Fuel Type and Megawatt

Fuel Type Index	Fuel Type	COMPONENT ID	Net MW	MWh	PMin	Forecast Election
Fuel 1	Wind	WIND3	5			CAISO
Fuel 2	Solar	SOLR1	5			CAISO
Fuel 3	Wind	WIND2	5			CAISO
Fuel 4	Solar	SOLR2				

COMPANY A

Through the RIMS UI, they were able to change the Battery back to Wind.

Please note that the Component ID is now WIND3.

What Questions Do You Have?



Unmute yourself

or



Raise your hand

Let's review user actions for the...

RIMS WEB FORM



Current Process: Download Excel Spreadsheet on NRI Page

CAISO website > Generation and Transmission > Generation > [New Resource Implementation](#) > Upload in RIMS

Bucket 1 – Full network model and forecast preparation

The following deliverables are required to create an ISO market Resource. Documents are essential for participation in ISO markets, plus documents to systems. This is also the time to submit the necessary information for ISO forms. Items must be submitted in advance of the bucket acceptance due dates.

Please refer to the [Metering and telemetry webpage](#) for metering documents form.

Visit the [Requesting access and certificates webpage](#) for information on establishing (ECN) and the [Connected Entity Service Guide](#).

- [Sample - Wind Site Information Form](#) [PDF](#) 08/24/2022, 1:02 PM
- [Sample - Solar Site Information](#) [PDF](#) 08/24/2022, 1:02 PM
- [Wind Site Information](#) [XLS](#) 02/21/2020, 8:35 AM
- [Solar Site Information](#) [XLS](#) 02/06/2020, 11:37 AM
- [Network Application Information Template](#) [DOC](#) 09/25/2024, 9:38 AM
- [Generator MVAR Data Template](#) [XLS](#) 09/16/2024, 9:38 AM

California ISO		Wind Site Information Form v4							
Wind Site Name & Physical Address									
CAISO Resource ID:									
Generation Capacity (AC)									
Note: "See topographical map" is not acceptable statement on this Wind Site Information Form.									
Section below is regarding Hybrid Resources only.									
Plant Type (Wind, Hybrid, or Co-Located)									
Section below is regarding Hybrid Resources only.									
If Hybrid please state:		Name plate capacity of wind component:			Name plate capacity of battery:				
MW Point of Interconnection (POI) Agreement:					Wind Component Forecast:				
Plant Location Use as many points as necessary to describe the site (WGS84 only)		Corner 1		Corner 2		Corner 3		Corner 4	
		Lat	Long	Lat	Long	Lat	Long	Lat	Long
Meteorological Station Location Provide the location of all met data									

Current Process: Upload Project Site Sheet

MPP > RIMS > MPAI > MPAI Dashboard > All Active > View button > Documents

- ▶ Meter Device ID's
- ▶ Phase Completion (COM/COD/Completion)
- ▶ Regulatory Contracts Contacts
- ▶ Monitor Internal Sync\COD\COM\QF\Conversion Approval Process
- ▶ Project Cost Roll Up
- ▼ Documents

Current Process
Under the Documents section, users upload Wind/Solar Site Information excel sheets.

Uploaded Files

1 - 10 of 79

Document Group	Document Type	File Name	Sharepoint Link	Uploaded Status	User	Uploaded Date	Comment
NRI	TopoMap			SUCCESS		12/17/2024	0 Comments
NRI	SiteInfo			SUCCESS		12/17/2024	0 Comments
NRI	ControlProtection			SUCCESS		11/22/2024	0 Comments

▼ Related Transmission Projects

New Process: Web Form in RIMS Replaces Site Info Document

RIMS > MPAI > MPAI Dashboard > All Active > View button > Short Term Forecast (STF) Information > Components web form

Documents

STF Information

STF Info

Project Type: Non-Generation Configuration Type: Hybrid & Co-located

Address:

Plant Location: Latitude: Longitude:

Megawatt Generation Capacity:

Components

Fuel Type Index	Fuel Type	Net MW	Component ID	Forecast Election	
Fuel 1	Wind	15	Wind_1	Scheduling Coordinator	View
Fuel 2	Solar	5	Solar_2	Scheduling Coordinator	View

Related Transmission Projects

New Process

Under the STF Information section, users fill out the web form for applicable components. Each component will have it's own form.

Comparison Example – Excel v. Web Form

California ISO		Solar Site Information Form v5			
Generation Capacity (MWs):	DC:		AC:		
Plant Type (PV, CPV, Thermal, Hybrid, or Co-Located):	PV		If thermal, please state hours or % of supplemental heat:		
Section below is regarding Hybrid Resources only.					
If Hybrid please state:	Name plate capacity of solar component:		Name plate capacity of battery:		
	MW Point of Interconnection (POI) Agreement:		Solar Component Forecast:		
Note: "See topographical map" is not acceptable statement on this Solar Site Information Form.					
Plant Location	Corner #1	Corner #2	Corner #3	Corner #4	
Use as many points as necessary to describe the site (Use WGS84 only)	Lat Long	Lat Long	Lat Long	Lat Long	

Solar Site Information
—

✕

Park Potential (MW): *

Solar Plant Type: *

Solar Thermal
^

- None
- Solar Thermal
- Photovoltaic
- CPV

If thermal, please state hours or % of supplemental heat...

Hours
 Percentage

Comparison Example – Excel v. Web Form

 **California ISO Solar Site Information Form v5**

Generation Capacity (MWs):	DC:		AC:	
Plant Type (PV, CPV, Thermal, Hybrid, or Co-Located):	PV		If thermal, please state hours or % of supplemental heating:	
Section below is regarding Hybrid Resources only.				
If Hybrid please state:	Name plate capacity of solar component:		Name plate capacity of battery:	
	MW Point of Interconnection (POI) Agreement:		Solar Component Forecast:	
Note: "See topographical map" is not acceptable statement on this Solar Site Information Form.				
Plant Location Use as many points as necessary to describe the site (Use WGS84 only)	Corner #1	Corner #2	Corner #3	Corner #4
	Lat Long	Lat Long	Lat Long	Lat Long

Solar Site Corner Coordinates (WGS84 datum) * required to enter at minimum four (4) project corner coordinates

+ Add Search

Actions	Lat	Long
✕ 	Lat	Long
✕ 	Lat	Long
✕ 	Lat	Long
✕ 	Lat	Long

Rows per page 5 1-4 of 4

Solar Component Web Form Walkthrough

Solar STF - SOLR1

Save

Cancel

Solar Site Information



Solar Site Corner Coordinates (WGS84 datum) * required to enter at minimum four (4) project corner coordinates



Capacity Information



Meteorological Information



Solar Panel Information



Features

Each section allows users to edit and add their solar information (*indicated by a pencil icon*).



Validations

RIMS runs validations to ensure user success:

- At each section level
- At the entire submission level

Web Form – Solar Site Information Section



Park Potential (MW)

Numeric value required



Solar Plant Types

- Photovoltaic
- Concentrated Photovoltaic (CPV)
- Solar Thermal* (*enter hours/percent*)



Features

Be sure to click the check mark to save.
RIMS has validations to ensure user success.

The screenshot shows a web form titled "Solar Site Information" with a close button (X) and a save button (checkmark). The form contains the following fields:

- Park Potential (MW): *** A text input field containing the value "345".
- Solar Plant Type: *** A dropdown menu with "Solar Thermal" selected. The dropdown list shows options: "None", "Solar Thermal", "Photovoltaic", and "CPV".
- If thermal, please state hours or % of supplemental heat...** A text input field containing the value "6".
- Radio buttons for "Hours" (selected) and "Percentage".

Web Form – Solar Site Coordinates Section



Site Corner Coordinates

List of latitude and longitude for each corner.



Validations

A minimum of four coordinates are required.
No repeating coordinates.



Features

Click the +Add button to add a new row.
Click the Pencil icon to edit.

Solar Site Corner Coordinates (WGS84 datum) * required to enter at minimum four (4) project corner coordinates

Actions	Lat	Long
<input type="checkbox"/>	Lat	Long

Rows per page 5 1-4 of 4

Web Form – Capacity Information Section

Capacity Information



Nameplate Capacity of Solar Component (MW):

MW Point of Interconnection (POI) Agreement (MW):

Solar Component Forecast:
CAISO

AC Capacity (MW): *

DC Capacity (MW): *



Capacity Information

MWs for capacity information of Solar component.



Validations

AC Capacity (MW) and DC Capacity (MW) are required.

Validation in RIMS

Capacity Information

✕

Nameplate Capacity of Solar Component (MW):

MW Point of Interconnection (POI) Agreement (MW):

Solar Component Forecast:
CAISO

AC Capacity (MW):*

DC Capacity (MW): *

This field is required.

This field is required.

The UI will indicate if a field is required.

Web Form – Meteorological Information

Meteorological Information

✕

Meteorological Station Sharing: *
Y

ISO Project Number Met Station Shared: *
This field is required.

Sharing Agreement Date: *
March 2025
Su Mo Tu We Th Fr Sa
23 24 25 26 27 28 1
2 3 4 5 6 7 8
9 10 11 12 13 14 15

Meteorological Station Location

+ Add

Search

Actions	Meteorological Station ID Numbers	Meteorological Station Coordinates (WGS84 datum)		AGL Height (ft)
		Lat	Long	
	21	37.007617	-120.965561	10
	24	36.930259	-120.965561	55

Rows per page 5 1-2 of 2



Station Sharing

Sharing Agreement only required if select Y.
If “Y” is selected:

- Provide Project Number of existing project in RIMS system.



Features

Clicking +Add will provide an additional row for users to enter information.

Web Form – Meteorological Information cont.

Meteorological Equipment Information

+ Add

Search

Actions	Met Station Equipment Make	Met Station Equipment Model	Anemometer		Air Temperature	Barometric Pre...	Irradiance	Back Panel Irradiance
✕	Met Station Equipmen	Met Station Equipmen	Wind Speed	Wind Direction	Air Temperature	Barometric Pressure	Irradiance	Back Panel Irradiance

Rows per page 5 1-1 of 1



Met Equipment Information

Free text fields for users to update information about their met station equipment details such as make, model, wind speed, air temp, remote sensing tools, etc.



Validations

Minimum of one row of record is required in this grid (*RIMS will prompt validation message and not allow to save*).

Validation in RIMS

Meteorological Station Sharing:

Clicking the save icon will run additional validations in RIMS (numeric numbers, required fields)

Meteorological Station Location

+ Add

Actions	Meteorological Station ID Numbers	Meteorological Station Coordinates (WGS84 datum)		
		Lat	Long	AGL Height (ft)
	30001	37.007617	Long	AGL Height (ft)

Rows per page 5 1 of 1

Web Form – Solar Panel Information

Solar Panel Information

+ Add

Search

Actions	Panel Manufac...	Panel Model	Number of Pan...	Panel Power Rating (MW)	Number of Inve...	Inverter Ratings	Solar Tracking	Solar Tracking ...	Solar T...
X	Panel Manufacturer	Panel Model	Number of Panels	Panel Power Rating (M	Number of Inverters	Inverter Ratings			Solar

Rows per page 5 1-1 of 1



Solar Panel Information

Free text and drop down menu fields for users to update information about their solar panel details such as manufacturer, model, number of panels/inverters, ratings, etc.



Validations

Minimum of one row of record is required in this grid (*RIMS will prompt validation message and not allow to save*).

Once Completed, Click Save for RIMS Validations

The screenshot shows the RIMS (Resource Interconnection Manager) interface. At the top left, there is a 'RIMS' logo and the text 'Resource Interconnection Manager'. Below this, the title 'Solar STF - SOLRI' is displayed. A callout box with an orange border contains the text: 'Clicking **Save** at the top will allow the system to perform field level validations at each component level (e.g., missing/ inaccurate information)'. An orange arrow points from this callout box to the 'Save' button in the top right corner of the form. The form itself consists of several sections, each with a dark blue header bar and a white content area. The sections are: 'Solar Site Information' (with a minus sign), 'Solar Site Corner Coordinates' (with a minus sign), 'Capacity Information' (with a plus sign), 'Meteorological Information' (with a plus sign), and 'Solar Panel Information' (with a plus sign). In the top right corner of the form, there are two buttons: 'Save' and 'Cancel'. There are also icons for a moon and a user profile in the top right corner of the page.

Error Message on Web Form Example

The screenshot displays the RIMS (Resource Interconnection Management System) interface for a project named "Solar STF - SOLR1". The "Solar Site Information" section is active, showing a "Park Potential (MW)" of 200.55 and a "Solar Plant Type" of Photovoltaic. A red error message box is overlaid on the form, listing several missing or incomplete fields: AC Capacity (MW), DC Capacity (MW), Meteorological Station Sharing, Solar Site Corner Co Ordinates (minimum four required), Meteorological Station Location (minimum one row required), Meteorological Equipment Information (minimum one row required), and Solar Panel Information (minimum one row required). An orange arrow points from a text box at the bottom to the error message. To the right, a table with columns "Actions", "Lat", and "Long" is visible, containing one row of data with coordinates 32.73333 and -118.207927. The table also includes a search bar and pagination controls.

RIMS Resource Interconnection Management System

Solar STF - SOLR1

Solar Site Information

✕

Park Potential (MW): *
200.55

Solar Plant Type: *
Photovoltaic

If thermal, please state hours or % of complemen Hours

Please enter missing information for following.

- AC Capacity (MW):
- DC Capacity (MW):
- Meteorological Station Sharing:
- Solar Site Corner Co Ordinates minimum four (4) required
- Meteorological Station Location minimum of one row of record is required
- Meteorological Equipment Information minimum of one row of record is required
- Solar Panel Information minimum of one row of record is required

84 datum) * required to enter at minimum four (4) project corner coordinates

+ Add

Search

Actions	Lat	Long
	32.73333	-118.207927

Rows per page 5 1-1 of 1

The UI will list areas a user needs to make corrections/ add data

What Questions Do You Have?



Unmute yourself

or



Raise your hand

Wind Component Web Form Walkthrough

Wind STF - WIND1

Save

Cancel

Wind Site Information



Plant Corner Coordinates (WGS84 datum) * required to enter at minimum four (4) project corner coordinates



Capacity Information



Meteorological Information



Wind Turbine Information



Features

Each section allows users to edit and add their wind information (*indicated by a pencil icon*).



Validations

RIMS runs validations to ensure user success:

- At each section level
- At the entire submission level

Web Form – Wind Site Information



Park Potential (MW)

Numeric value required



Features

Click the pencil icon to edit.

RIMS has validations to ensure user success.

Wind Site Information

✕

Park Potential (MW): *

Web Form – Wind Site Coordinates Section



Site Corner Coordinates

List of latitude and longitude for each corner.



Validations

A minimum of four coordinates are required.
No repeating coordinates.



Features

Click the +Add button to add a new row.

Plant Corner Coordinates (WGS84 datum) * required to enter at minimum four (4) project corner coordinates

Actions	LAT	LONG
<input type="checkbox"/> <input type="checkbox"/>	LAT	LONG
<input type="checkbox"/> <input type="checkbox"/>	LAT	LONG
<input type="checkbox"/> <input type="checkbox"/>	LAT	LONG
<input type="checkbox"/> <input type="checkbox"/>	LAT	LONG

Rows per page 5 1-4 of 4

Web Form – Capacity Information Section

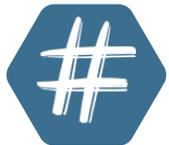
Capacity Information

✕ ✓

Nameplate Capacity of Wind Component (MW):

Point of Interconnection (POI) Agreement Megawatt...

Wind Component Forecast Selection:
CAISO



Capacity Information

MWs for capacity information of Wind component.



Features

Click the pencil icon to edit.
RIMS has validations to ensure user success.

Web Form – Meteorological Information

Meteorological Information

Meteorological Station Location

+ Add

Search

Meteorological Station Coordinates (WGS84 datum)				
Actions	Meteorological Station ID Numbers	Lat	Long	AGL Height (ft)
X	Meteorological Station ID Nurr	Lat	Long	AGL Height (ft)

Rows per page 5 1-1 of 1



Met Coordinates

Be sure that you are entering numeric values.



Features

Clicking +Add will provide an additional row for users to enter information.

Web Form – Meteorological Information cont.

Meteorological Equipment Information

+ Add

Search

Actions	Make/Met Station Equipment	Model	Anemometer		Air Temperature	Barometric Pre...	Remote Sensing Tools	Primary
✕	Make/Met Station Equ	Model	Wind Speed	Wind Direction	Air Temperature	Barometric Pressure		<input type="checkbox"/>

Rows per page 5 1-1 of 1



Met Equipment Information

Free text fields for users to update information about their met station equipment details such as make, model, wind speed, air temp, remote sensing tools, etc.



Validations

Minimum of one row of record is required in this grid (*RIMS will prompt validation message and not allow to save*).

Web Form – Turbine Specifications

Wind Turbine Information

Turbine Specifications

+ Add

Search

Actions	Turbine Make	Turbine Model	Number of Tur...	Turbine Maximum Generation Capacity (MW)	Turbine Height Above Ground Level (meters)	Cut in Speed (...)	Cut Out Speed ...	Cold Weather Package	Hot Weather Pa...	Low Temperature Cut Out (Deg F)	H	T	C
 	54S46try	5461try	55	43232	23423	23423	234	Y	Y	34242	2		

Rows per page 5 1-1 of 1



Turbine Details

Free text and drop down menu fields for users to update information about their turbine details such as make, model, number of turbines, cut in/out speed, etc.



Validations

Minimum of one row of record is required in this grid (*RIMS will prompt validation message and not allow to save*).

Web Form – Turbine Locations Section

Turbine Locations					
+ Add		Search <input type="text"/>			
Actions	Wind Turbine ID Numbers	Elevation (mete...	Hub Height (me...	Turbine Latitude/Longitude Coordinates (WGS84 datum)	
	Lat	Long			
<input type="checkbox"/>	<input type="text" value="Wind Turbine ID Numbe"/>	<input type="text" value="Elevation (meters)"/>	<input type="text" value="Hub Height (meters)"/>	<input type="text" value="Lat"/>	<input type="text" value="Long"/>

Rows per page 5 1-1 of 1



Turbine Locations

Free text and drop down menu fields for users to update information about their turbine locations such as ID numbers, elevation, hub height, latitude, and longitude.



Validations

Number values are required, if anything is entered the RIMS system will run validations and prompt an error message.

Once Completed, Click Save for RIMS Validations

The screenshot shows the RIMS (Resource Interconnection) interface. At the top left, there is a logo for RIMS and the text 'Resource Interconnection'. Below this, the page title is 'Wind STF - WIND1'. On the right side of the header, there are icons for a moon (dark mode) and a user profile. A callout box with an orange border and an arrow pointing to the 'Save' button contains the text: 'Clicking **Save** at the top will allow the system to perform field level validations at each component level (e.g., *check for missing/ inaccurate information*)'. Below the header, there are four expandable sections: 'Wind Site Information', 'Plant Corner Coordinates (WGS84 datum) * required to enter at minimum four (4) project corner coordinates', 'Capacity Information', 'Meteorological Information', and 'Wind Turbine Information'. Each section has a plus sign on the right side.

What Questions Do You Have?



Unmute yourself

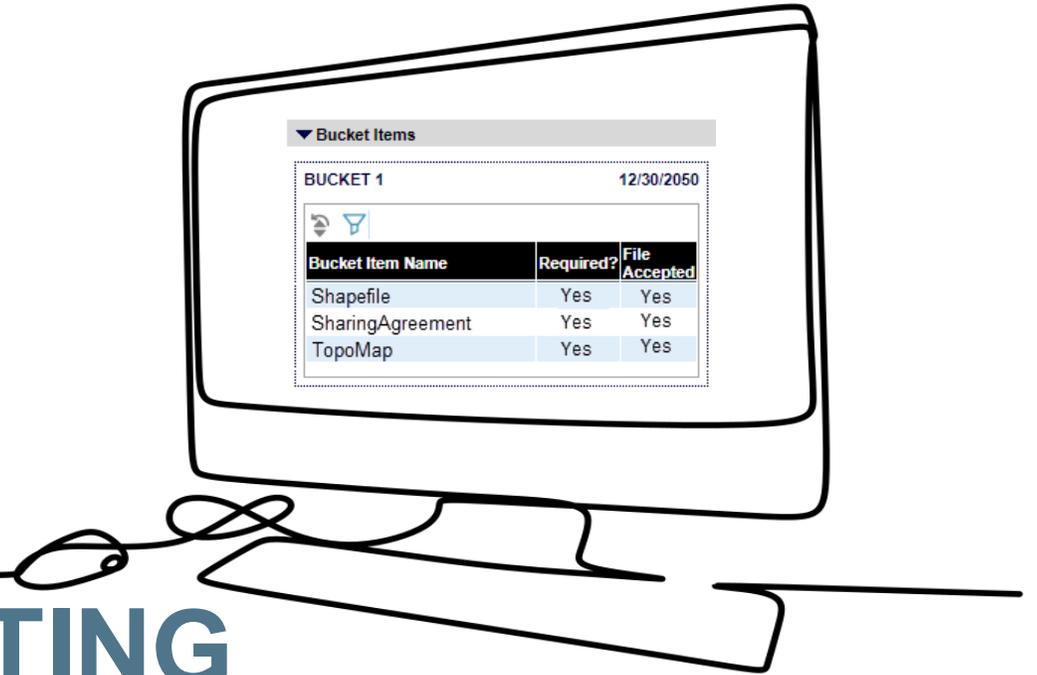
or



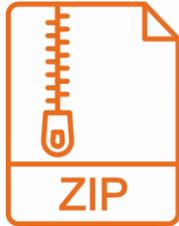
Raise your hand

Let's review the necessary steps for...

UPLOADING & SUBMITTING DOCUMENTS



Key Documents



Shapefiles

For Wind or Solar
Project coordinates, met station coordinates, and turbine information *(as applicable)*.

File Types: Zip files containing .CPG, .DGF, .PRJ, .SHP, .SHX



Sharing Agreement

For Solar *(if applicable)*
Met stations that are shared and signatures from the resources sharing

File Types: Word or PDF

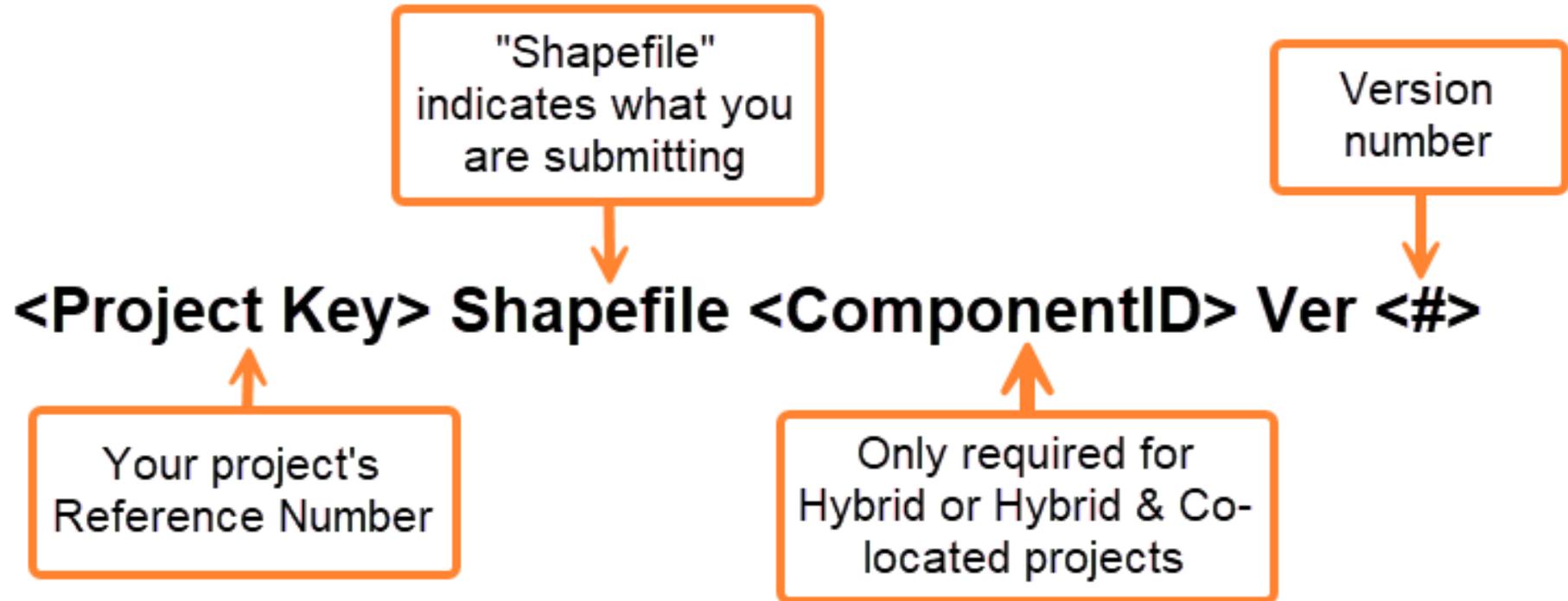


TopoMap

For Wind or Solar
A topographical map illustrating the location of all met stations and wind turbines *(if applicable)* by latitude and longitude.

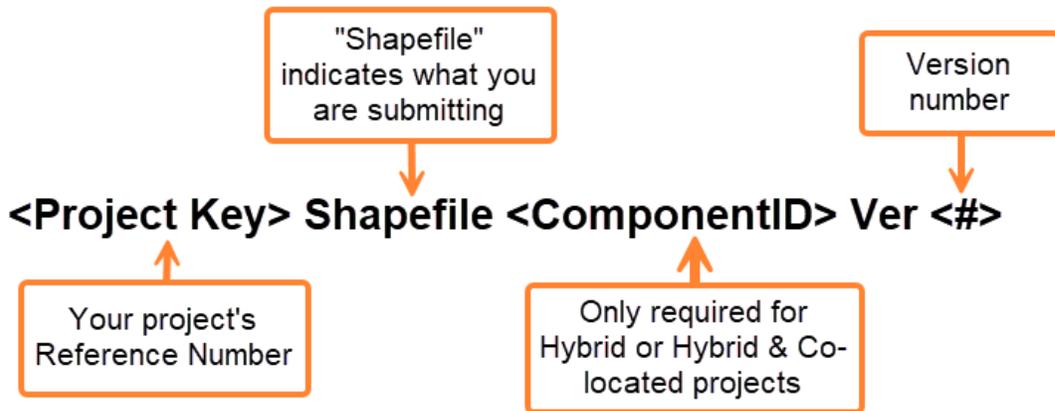
File Types: XLSX or PDF

Shapefile Naming Convention



Important Reminder: Shapefiles must be submitted as a Zip file.

Example of Shapefile Naming Convention (Hybrid v. Single projects)



Example of Hybrid project	
Solar file formatting	Wind file formatting
24NGR44444 Shapefile SOLAR1 VER1	24NGR44444 Shapefile WIND1 VER1

Example of Single project	
24NGR44444 Shapefile VER1	24NGR44444 Shapefile VER1

Please note: ComponentID is only required for Hybrid or Hybrid&Co-located projects

Resources for Shapefiles

Readiness Note

Located on the [Training center](#), users can walkthrough an example of creating and exporting Shapefiles.

Shapefile Software

User to determine. The software used in the example is Quantum Geographic Information System (QGIS). *Please note, that while the ISO uses this software, this is not the only option.*

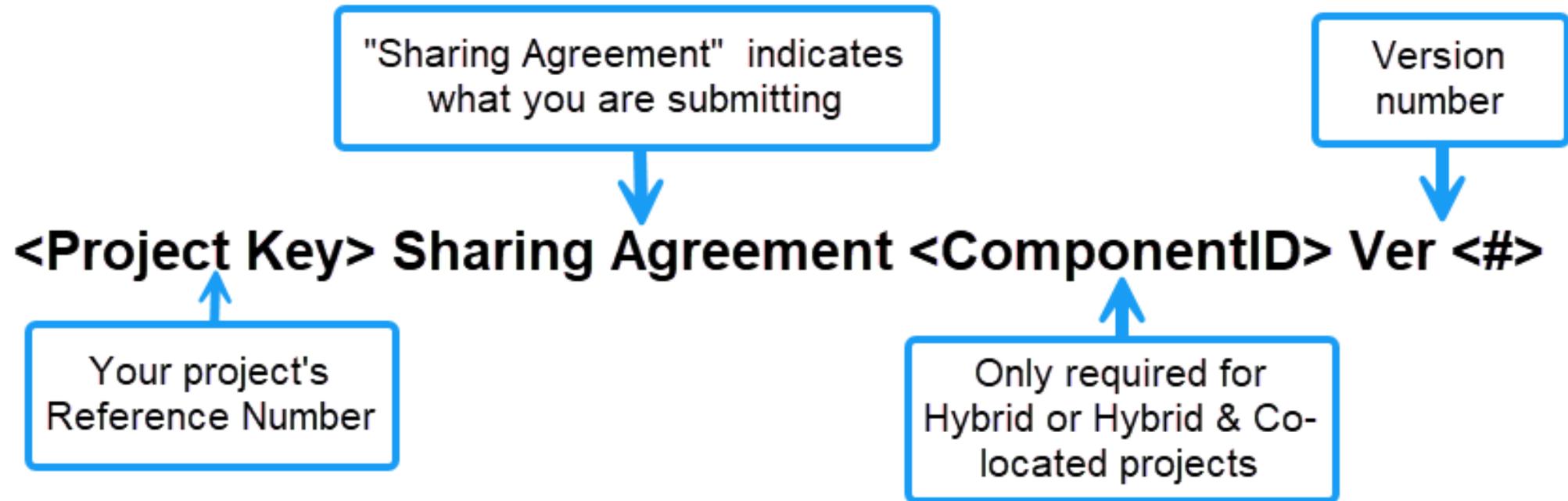


CSV Templates

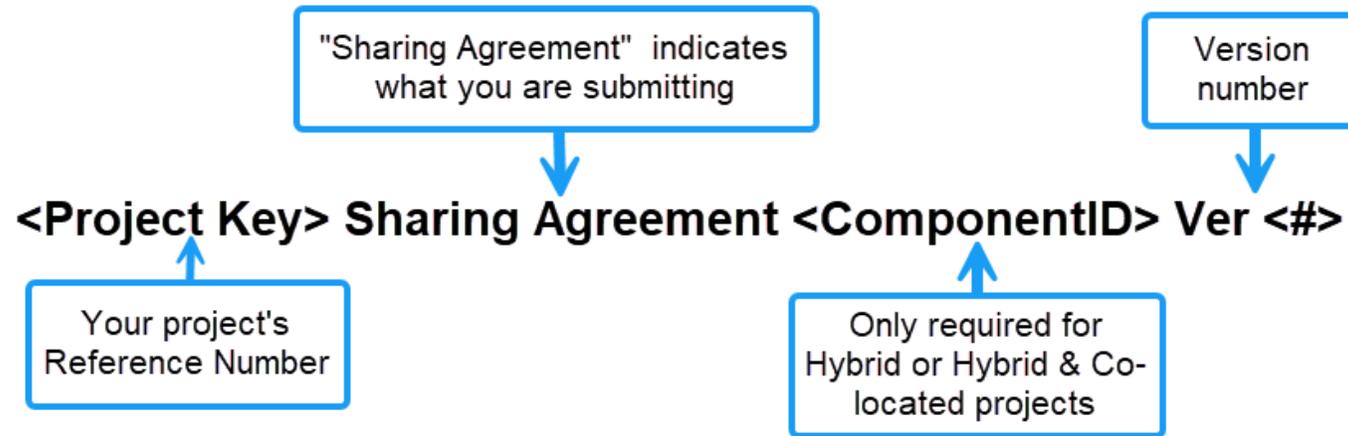
Located on the [Release planning page](#).

- Solar: Project and Met Station Coordinates
 - Wind: Project and Met Station Coordinates and Turbine Information.
-

Submitting a Sharing Agreement for Solar *(if applicable)*



Example of Sharing Agreement Naming Convention (Hybrid v. Single projects)



Example of Hybrid project

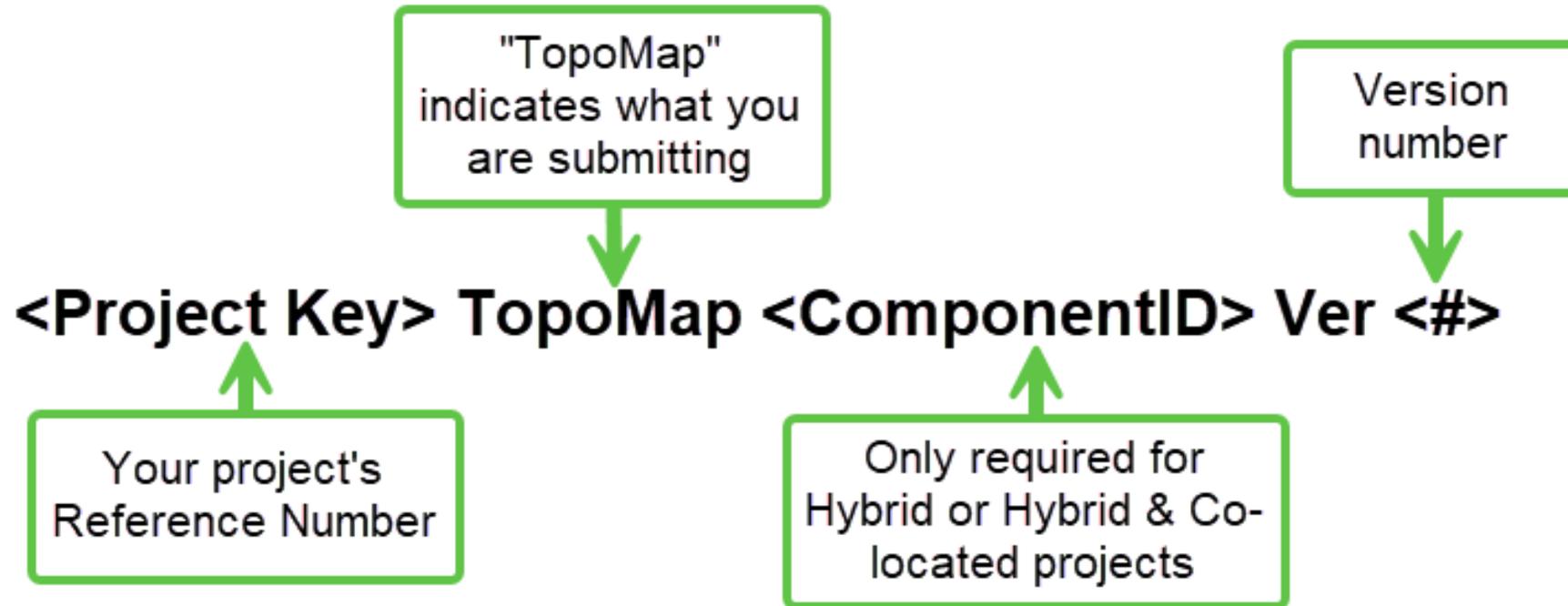
24NRG44444 SharingAgreement WIND1 Ver1

Example of Single project

24NRN44444 SharingAgreement Ver1

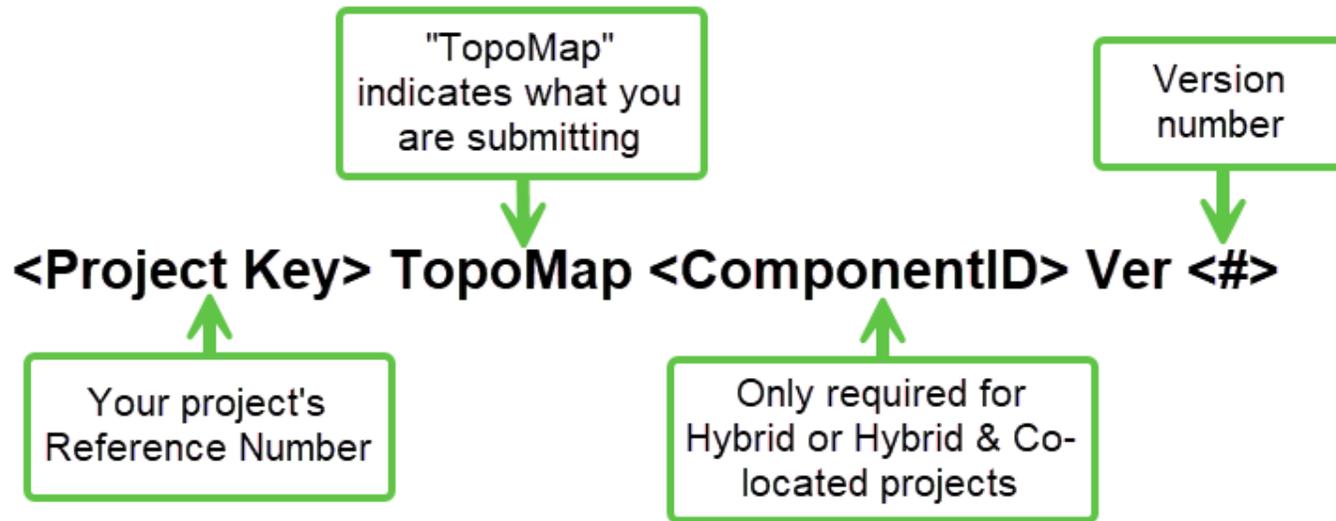
Please note: ComponentID is only required for Hybrid or Hybrid&Co-located projects

Submitting a TopoMap



Important Reminder: TopoMap must be submitted as a XLSX or PDF file.

Example of TopoMap Naming Convention (Hybrid v. Single projects)



Example of Hybrid project

24NRG44444 TopoMap WIND1 Ver1

Example of Single project

24NRN44444 TopoMap Ver1

Please note: ComponentID is only required for Hybrid or Hybrid&Co-located projects

Logistics – When to Upload Documents

RIMS > MPAI > MPAI Dashboard > All Active > View button > Documents > Upload Project Files

After completing each component's Web Form, users will upload required documents.

- ✓ Solar Project Documents → Shapefile, TopoMap, and Sharing Agreement (*if applicable*)
- ✓ Wind Project Documents → Shapefile and TopoMap.

▼ Documents

Uploaded Files

☰ ☱ ☲ ☳

Document Group	Document Type	File Name	Sharepoint Link	Uploaded Status	User	Uploaded Date ▼	Comment
----------------	---------------	-----------	-----------------	-----------------	------	-----------------	---------

←

▼ STF Information

After Documents Uploaded, Click Submit on STF Information Section

RIMS > MPAI > MPAI Dashboard > All Active > View button > STF Information > Submit

Clicking **Submit** will prompt RIMS will run validations at each component level.

▼ STF Information

STF Info

Project Type: Configuration Type: Hybrid & Co-located

Address:

Plant Location: Latitude:

Longitude:

Megawatt Generation Capacity:

Components

Fuel Type Index ▲	Fuel Type	Net MW	Component ID	Forecast Election	
Fuel 2	Solar	5	SOLR1	CAISO	View
Fuel 3	Wind	5	WIND1	CAISO	View

[Submit](#) ←

Validations Email to Resource Owner Example



In addition to the UI in RIMS, validation emails send to listed resource owner(s).

From: rims-noreply@caiso.com <rims-noreply@caiso.com>

Sent: Thursday, February 6, 2025 11:42 AM

To: Project Owner

Subject: [Project Code] STF document/s rejected

For [Project Code] the final submission of the STF documents have been rejected for the following reason(s):

SOLR1: System notices that meteorological station installation does not meet required number of stations relative to megawatt generation that is ≥ 5 MW (compare against the Name Plate (MW) field) requires at least two meteorological stations

SOLR1: : The [Project Code] has indicated that there is Meteorological Station Sharing. A sharing Agreement is required per Appendix Q of the CAISO Tariff. You are to submit a Sharing Agreement for this in the format of SharingAgreement_SOLR1 for each Solar component in the project.

SOLR1: SharingAgreement file has not been uploaded

SOLR1: TopoMap file has not been uploaded

SOLR1: Shapefile file has not been uploaded

SOLR3: Please provide all required information before submitting the form.

SOLR3: TopoMap file has not been uploaded

SOLR3: Shapefile file has not been uploaded

WIND1: Please provide all required information before submitting the form.

WIND1: System notices that meteorological station installation does not meet required number of stations relative to megawatt generation that is ≥ 5 MW (compare against the Name Plate (MW) field) requires at least two meteorological stations

WIND1: TopoMap file has not been uploaded

WIND1: Shapefile file has not been uploaded

Login in to RIMS to make the required updates and resubmit.

What Questions Do You Have?



Unmute yourself

or



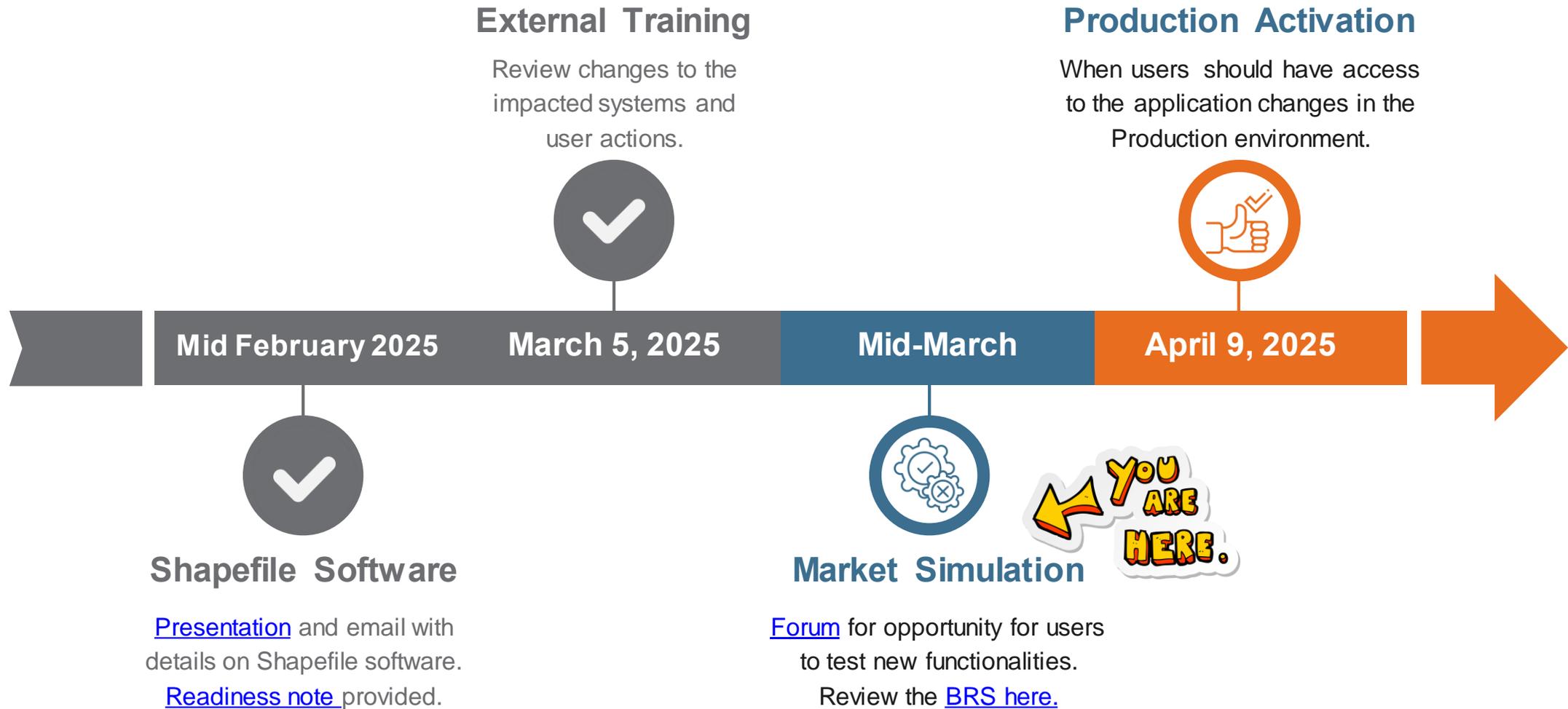
Raise your hand

Let's review the necessary steps for...

MARKET SIMULATION & WRAP UP



Recap of Timeline of Project



Unstructured Market Simulation

Hybrid Resource Phase 2C RIMS
Unstructured Market Simulation will begin in **mid-March**.

- Dates and additional details (*e.g., access, timing*) will be communicated to users via email and user group forums.

Additional details can be found in the project's [Business Requirements Specifications \(BRS\)](#).

ID#	Guidance on Market Participant Impacts	Source System	Sink System	Reason for Potential Scenario
MKT – 006	<p>Unstructured Market Simulation</p> <p>Market Participant must have the capability to see on UI uploaded Topo Map, Sharing Agreement, Shapefile, and provide Site Info via web form.</p> <p>Note: See BRQ150, BRQ285, BRQ144, BRQ300.</p>	N/A	RIMS	Unstructured Market Sim, New Data type
MKT – 007	<p>Unstructured Market Simulation</p> <p>Market Participants must have the capability to add Topo Map, Site Info, Shapefile, and Sharing Agreement (applicable only to Fuel Type of Solar) to Bucket 1 for any hybrid resource project created with a fuel type of Solar or Wind.</p> <p>Note: BRQ145, BRQ275.</p>	N/A	RIMS	Unstructured Market Sim, New Data type
MKT – 008	<p>Unstructured Market Simulation</p> <p>In the event Market Participant's upload fails validation, Market Participant must receive notification of the error.</p> <p>Note: See BRQ350A, BRQ350B, BRQ205, BRQ335, BRQ325.</p>	N/A	RIMS	Unstructured Market Sim, New Data type

Participate in Market Simulation

If you have questions about this Market Sim, please email MarketSim@caiso.com.

Attend Market Simulation Forum calls to stay informed on timing of activities for this and other release

- Thursday 2pm PPT

Submit questions to the ISO via the CIDI application

CONTACT CUSTOMER SUPPORT
TELL US HOW WE CAN HELP

* SCID

* Functional Environment
--None--
--None--
Production
Market Simulation
Release
RC Integration
RC Shadow Operations
Parallel Operations
Request

Review for Price Correction

Manual Reference Level Change Request

* Subject

What Questions Do You Have?



Unmute yourself

or



Raise your hand



Tell us how we did

Takes 3-5 minutes to complete

Helps us improve future training

Link: <https://www.surveymonkey.com/r/caisocoursesurvey>

Instructor Dottie

Training course Other: Hybrid Resources Phase 2C – RIMS

Thank you for your participation!



For clarification on anything presented in this training, send an email to:
CustomerReadiness@caiso.com

For other questions or stakeholder specific questions or concerns use one of these methods:

- Submit a [CIDI ticket](#)
- Contact your Scheduling Coordinator
- Use the “[Contact us](#)” page on caiso.com to submit questions



Reference Links

Notice of training <https://www.caiso.com/notices/pre-market-simulation-training-for-hybrid-resource-phase-2c-rims-on-3-5-25>

Release User Group (RUG) presentation on 2/18
<https://www.caiso.com/documents/presentation-release-user-group-feb-18-2025.pdf>

Readiness note <https://www.caiso.com/documents/readiness-notes-sample-shapefile-submission-walkthrough.pdf>

Business Requirements Specifications (BRS)
<https://www.caiso.com/documents/businessrequirementspecification-hybridresourcesphase2c-rims.pdf>

Market Simulation Forum <https://www.caiso.com/meetings-events/topics/market-simulation-meeting>

New Resource Implementation Guide
<https://www.caiso.com/documents/newresourceimplementationguide.doc>