



California ISO
Your Link to Power

Transmission Register PTO Admin User Manual

Version 1.0

Table of Contents

1. INTRODUCTION.....	3
1.1. Purpose	3
1.2. Scope.....	3
1.3. Definitions	3
2. COMPONENTS HOMEPAGE	6
2.1. Find Components.....	6
2.2. Link Components.....	6
2.3. Add New Components.....	7
2.3.1. Copy Information from Existing Component	9
2.3.2. Manually Enter Change Request.....	12
3. REQUESTS PAGE	14
3.1. Find Change Requests	15
3.2. Find Share Components.....	17
3.3. AutoLoad Change Requests and AutoLoad Change Requests History	19
4. ADMIN SCREEN.....	20
4.1. Users	20
4.2. Rating Types.....	20
4.3. Rating Notes	21
5. REPORTING SCREEN	22
6. REVISION HISTORY.....	23

1. Introduction

The Transmission Register (TR) is a secure Web-enabled database environment for CAISO internal users and specific Participating Transmission Owners (PTO) to access TR data.

The TR discloses for each transmission line and associated facility the:

- Identity of the PTO responsible for operation and maintenance, and its owners.
- Dates which the CAISO assumed or relinquished Operational Control.
- Date of any change in the identity of the PTO responsible for its operation and maintenance, or in the identity of its owner.
- Transmission equipment's applicable ratings and history.

The PTO Admin maintains and manages the Component information for their Organization within the TR. Their responsibilities and permissions include, but are not limited to:

- ✓ Creating Change Requests for Component additions and modifications.
- ✓ Defining relationships between Components (linking) as well as between Organizations (sharing).
- ✓ Viewing users, rating types, and rating notes specific to their organization.

Note: Refer to the [Transmission Register CAISO & PTO General User Manual](#) for the basic steps to navigate within TR, and to the [Transmission Register Autoloader User Manual](#) to perform bulk Change Requests.

1.1. Purpose

The TR maintains the official listing of transmission lines, associated facilities, and Entitlements that are subject to the CAISO's Operational Control, as required by the Transmission Control Agreement, Section 4.2. An individual from each organization must be designated as the PTO Admin to add, update, or delete component information to ensure the TR database has the most current information.

1.2. Scope

The PTO Admin is appointed permission to manage, modify, report, and view all Components that are maintained, owned by, or shared with their specific Organization.

1.3. Definitions

The following defined terms and acronyms are used within this document:

Object	Definition
BSCB	Bus Sectionalizing Circuit Breaker
CABLE	Cable
CAP	Shunt Capacitor
CB	Circuit Breaker

Transmission Register PTO Admin User Manual

Object	Definition
Component	A single piece or grouping of electrical transmission equipment embedded within the Grid System. Attributes that define a component include the Organization, Owner, Description, Station, Voltages, Ratings, and ISO or Non-ISO.
COND	Overhead Conductor
CSW	Circuit Switch
CT	Current Transformer
DISC	Disconnect Switch
Dynamic	A TR search type, which allows the User to select a value as search criteria, and the values of other search criteria are dynamically limited to only applicable values based on the selected value. If a User chooses to perform a dynamic search, the dynamic search fields are limited to the following fields, and values must be selected in the order shown as follows: <ul style="list-style-type: none"> • Organization • Station • High Nominal Voltage • Equipment Type
Equipment	Electrical transmission equipment category created to represent a Component, e.g. Circuit Breaker, Transformer, Leg, Transmission Line Segment, etc.
FUSE	Fuse
ISO Equipment	Represents Components turned over to the ISO for their Operational Control.
LEG	Typically consists of a CB, DISCs, and COND at a CB position inside a Station.
MOD	Motor Operated Disconnect Switch
Nominal Voltage	Represents the voltage class at which an Organization has decided is the utility industry-wide standard value used to classify a range of voltages it actually operates its Components by, e.g., 220 or 225 kV Operating Voltages would each fall into the 230 kV voltage class.
NULL	Empty or none
OID	Component Identification Number
Operating Voltage	Represents the voltage at which an Organization has decided to operate their Components for a specific Nominal Voltage of the Organization.
Organization	A utility entity that either performs the maintenance on and/or physically operates the Components listed under its name.
Owner	A utility entity that has an ownership percentage of or entitlements to the Components listed under its name.
PTO	Participating Transmission Owner
Rating Note	An Organization specific note that provides additional rating limit detail an operator needs to use when operating the Component.

Transmission Register PTO Admin User Manual

Object	Definition
Rating Type	All rated Components have at least four rating types that represent Summer Normal, Summer Emergency, Winter Normal, and Winter Emergency ratings, and are used to populate the Detailed Network Model (MVA1, MVA2, MVA3, and MVA4). Additional rating types may be added by the Organization that represents special emergency or planning conditions. Within each rating type is an AMP and/or MVA/MVAR value that provides the user the electrical limits a Component can be operated at or planned for while under normal or emergency conditions.
RCT	Shunt Reactor
REG	Regulator
RLY	Relay
SCAP	Series Capacitor
SCND	Synchronous Condenser
SRCT	Series Reactor
Static	A TR search type that allows the User to openly select or enter values as search criteria, and then submit all values at once.
Station Name	Organization specific Substation/Switching Station full name or a special category (Transmission Line) reserved to be the umbrella for all Organization specific transmission circuits and their associated equipment types.
SVC	Static VAR Compensator
TERM	Represents one terminus of a transmission line typically consisting of a LEG(s) and line drop CONDS.
TL	Transmission Line
TLS	Transmission Line Section
TR	Transmission Register
Transmission Facilities	All equipment and Components transferred to the ISO for Operational Control, pursuant to the Transmission Control Agreement, such as overhead and underground transmission lines, Stations, and associated facilities.
TRCT	Tertiary Reactor
WTRP	Wave Trap
XFMR	Transformer
XFMR BANK	Transformer Bank
XFMR BAY	Transformer Bay

2. Components Homepage

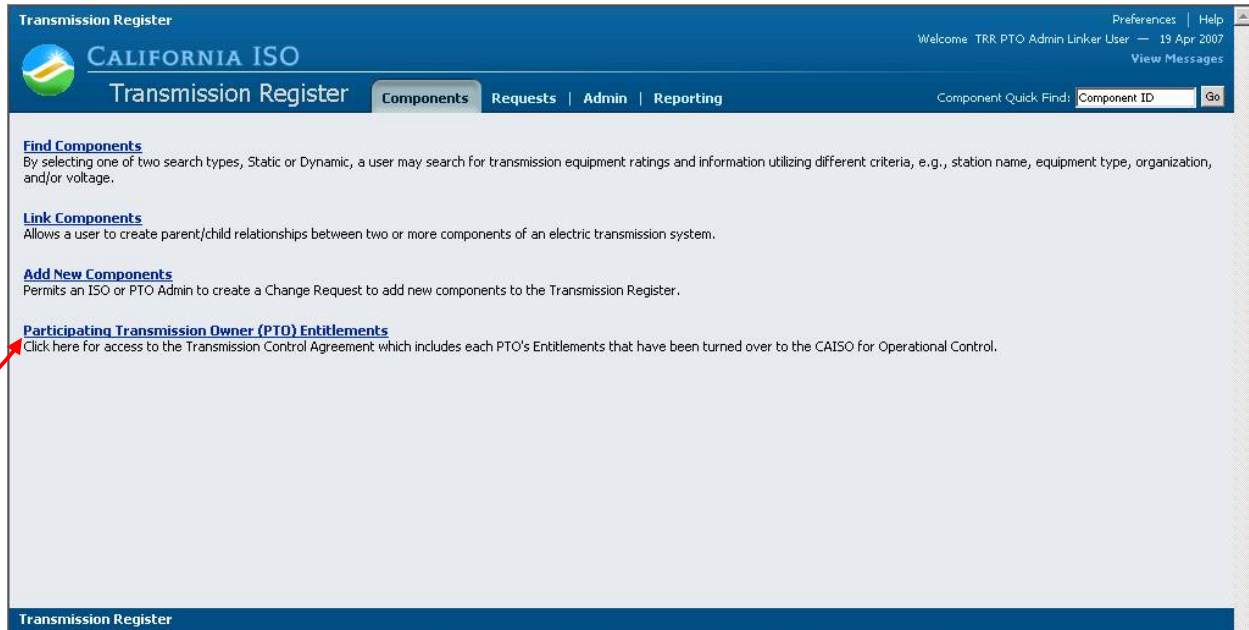


Figure 1. TR Homepage

Once TR is accessed, the application defaults to the screen shown in Figure 1. The following subsections provide details for navigating through each of the displayed hyperlinks.

Note: Click on the hyperlink to access the Participating Transmission Owner (PTO) Entitlements.

2.1. Find Components

For steps to Find Components, refer to section 3.2. of the [Transmission Register CAISO & PTO User Manual](#).

2.2. Link Components

For steps to Link Components, refer to section... of the [Transmission Register Component Linking Manual](#).

2.3. Add New Components

Figure 2. New Component Change Request Screen

A PTO Admin is responsible for notifying the Grid of any new grid assets. This is performed by either filling out a TR Change Request, or if there are numerous changes, by utilizing the TR AutoLoad tool. For steps to upload bulk changes/additions, refer to the [Transmission Register AutoLoader User Manual](#). In this instance, we will go through the steps to add one component at a time:

- Click on the [Add New Components](#) hyperlink shown in Figure 1, and the screen in Figure 2 loads.
 - Select the appropriate Process Type radio button:
 - Upon Approval- based on the basic TR Admin approval process.
- OR
- Upon Effective Date- based on the date the component becomes operative.

Figure 3. Proposed Effective Date

Transmission Register PTO Admin User Manual

- If the Change Request is based Upon Effective Date, Then:
 - Type in the Proposed Effective Date,
 OR
 - Select the effective date by clicking on the date icon shown in Figure 3. A calendar displays.
 - Click the desired day of the month and the calendar automatically closes.
 Otherwise, proceed to the next step.
- Select a Change Request Reason from the drop-down window. Refer to Table 1 for Change Request Reason explanations.

Change Request Reason (used for AutoLoad file)	<i>Reason Explanation</i>	Type of Change Designation
Change Facility from/to Non ISO Facility	Change a transmission/station facility in TR that either transitioned into or out of CAISO's Operational Control.	Update, Retire
Convert Rating Unit Type	Correct a miss-entered unit type, i.e., AMPS, MVA, or MVAR.	Update
Corrected a Data Input Error	Correct an existing record in TR that contains misinformation.	Update
Facility Added (Facility Previously Existing but Not in Registry)	Add a transmission/station facility not currently logged into TR that has been and still is a part of the Grid.	Create
Facility Description Changed (Physically Unchanged)	Modify the TR component description of an existing transmission/station facility.	Update
Future Facility / Not Yet In Service	Log a transmission/station facility into TR planned for future service.	Create
Historical change, original reason unknown	Reason given to historical TR changes that did not have an identified change request reason. <i>Historical only, this Change Request Reason is no longer available for use.</i>	Update, Retire
New GRID Asset (Facility Previously Non-Existing Until New Construction)	Log a previously non-existent transmission/station facility into TR.	Create
Other (Causes not covered in above listing)	Use to cover any aspect not mentioned in the change request other reasons.	Create, Retire, Update
Rating Repetition (Removed emergency ratings identical to normal ratings)	Remove emergency ratings identical to the normal ratings. <i>Historical only, this Change Request Reason is no longer available for use.</i>	Update
Replaced Existing Equipment	Use when an existing transmission/station facility is replaced.	Update
Retired Duplicate Facility Entry	Use to correct a second entry of a transmission/station facility improperly entered.	Update
Revised Ratings (Equipment Physically Unchanged)	Log modified ratings of an existing, reevaluated transmission/station facility.	Update
Transmission Line/Facility Reconfigured (Physically Changed)	Enter reconfigurations of existing transmission/station facilities after physical modifications are installed.	Update, Retire

Table 1. Change Request Reasons

Change Request: TBD Status: Work In Progress

Process Type: Upon Approval Upon Effective Date

Proposed Effective Date:

Reason: Convert Rating Unit Type

Originator: mlien

Component ID: TBD [Copy From Component Without Ratings](#) [Copy From Component With Ratings](#)

Organization:

Owners:

Station:

Equipment Type:

Description:

High Nominal Voltage (kV):

Low Nominal Voltage (kV):

Tertiary Nominal Voltage (kV):

ISO Control: Yes No

ISO Control Start Date:

ISO Control End Date:

Additional Info:

AMP Rating	MVA Rating	MVA High	MVA Low	Duration	Notes
* MVA ratings are either entered directly by the PTO or calculated using the PTO AMP Rating with the following equation: [MVA = (KV * AMPS * 1.732) / 1000]. This rating applies for all equipment except for Shunt Reactive Devices where the values are in MVAR instead of MVA.					

Figure 4. Change Request Screen

To save time and energy, the user can pull previously existing component information, either with or without ratings, into the Change Request screen (refer to Figure 4), or manually fill out the Change Request. To pull previously existing component information, proceed to Section 2.3.1. For steps to manually fill out the Change Request, advance to Section 2.3.2.

2.3.1. Copy Information from Existing Component

The user can choose to use preexisting component information with or without ratings:

- If components *without* ratings are required,
Then click on the [Copy from Component Without Ratings](#) hyperlink and the screen in Figure 5 loads.
- If components *with* ratings are required,
Then click on the [Copy from Component With Ratings](#) hyperlink and the screen in Figure 5 also loads.

Select Component [OK] [Cancel]

Component Search

Station: SLY PARK DAM Voltage (kV): 152 Equipment Type: CB [Run Search]

Station	Type	Component Description
SLY PARK DAM	CB	132
SLY PARK DAM	CB	152
SLY PARK DAM	CB	162

Component Details

Description: 132
ID: 108395 High (kV): 115
Org: PLUD Low (kV):
Owners: PLUD Tertiary (kV):
Effect Date: 12/22/1998 ISO: N
Last Mod Date: 03/12/2001 Start Date: 12/22/1998
Station: SLY PARK DAM End Date: 03/12/2001
Equip Type: CB Additional Info:
Length: Line #:
Pending Request: N/A

Ratings

Rating Type	AMP Rating	MVA Rating	MVA High	MVA Low	Duration	Notes
SN (N)	2000	398.36			C	

[OK] [Cancel]

Figure 5. Component Search Screen

One or all of the choices can be selected, but To narrow the search, we will select all of the options:

- Select a station from the dropdown window.
- Select a voltage (kV) from the dropdown window
- Select the Equipment Type from the dropdown window (refer to Section 1.3. for the definitions of the equipment short names).
- Press the Run Search button and the window loads with rating information, as shown in Figure 5.
- Select one of the station results and the choice highlights.
- Press the OK button.
 - If no ratings were selected, then the screen in Figure 6 loads.
 - If ratings were selected, then the screen in Figure 7 loads.

Transmission Register PTO Admin User Manual

Change Request: TBD Status: Work In Progress

Process Type: Upon Approval Upon Effective Date

Proposed Effective Date: []

Reason: Convert Rating Unit Type

Originator: []

Component ID: TBD [Copy From Component Without Ratings](#) [Copy From Component With Ratings](#)

Organization: PLUD

Owner: PLUD

Station: AVALADOR

Equipment Type: XFMR BANK

Description: SK 6

High Nominal Voltage (KV): []

Low Nominal Voltage (KV): []

Tertiary Nominal Voltage (KV): []

ISO Control: Yes No

ISO Control Start Date: 12/13/2002

ISO Control End Date: []

Additional Info: 1 & 4 from ratings reduced to match PLUD

	AMP Rating	MVA Rating	MVA High	MVA Low	Duration	Notes
SN (N)					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
SE (A)					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
WN (B)					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
WE (C)					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
D					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
E					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
F					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
G					<input checked="" type="radio"/> Con. <input type="radio"/>	[]

* MVA ratings are either entered directly by the PTO or calculated using the PTO AMP Rating with the following equation: $MVA = (KV * AMPS * 1.732) / 1000$. This rating applies for all equipment except for Shunt Reactive Devices where the values are in MVAR instead of MVA.

Figure 6. Copied Component Information without Ratings

Change Request: TBD Status: Work In Progress

Process Type: Upon Approval Upon Effective Date

Proposed Effective Date: []

Reason: Convert Rating Unit Type

Originator: []

Component ID: TBD [Copy From Component Without Ratings](#) [Copy From Component With Ratings](#)

Organization: PLUD

Owner: PLUD

Station: AVALADOR

Equipment Type: XFMR BANK

Description: SK 6

High Nominal Voltage (KV): 232.0

Low Nominal Voltage (KV): 115.0

Tertiary Nominal Voltage (KV): 13.2

ISO Control: Yes No

ISO Control Start Date: 12/13/2002

ISO Control End Date: []

Additional Info: 1 & 4 from ratings reduced to match PLUD

	AMP Rating	MVA Rating	MVA High	MVA Low	Duration	Notes
SN (N)	1400.0	557.704			<input checked="" type="radio"/> Con. <input type="radio"/>	[]
SE (A)	1400.0	557.704			<input checked="" type="radio"/> Con. <input type="radio"/>	[]
WN (B)	1400.0	557.704			<input checked="" type="radio"/> Con. <input type="radio"/>	[]
WE (C)	1400.0	557.704			<input checked="" type="radio"/> Con. <input type="radio"/>	[]
D					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
E					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
F					<input checked="" type="radio"/> Con. <input type="radio"/>	[]
G					<input checked="" type="radio"/> Con. <input type="radio"/>	[]

* MVA ratings are either entered directly by the PTO or calculated using the PTO AMP Rating with the following equation: $MVA = (KV * AMPS * 1.732) / 1000$. This rating applies for all equipment except for Shunt Reactive Devices where the values are in MVAR instead of MVA.

Figure 7. Copied Component Information with Ratings

2.3.2. Manually Enter Change Request

Transmission Register
CALIFORNIA ISO
Transmission Register Components | Requests | Admin | Reporting

Change Request: TBD Status: Work In Progress

Process Type: Upon Approval Upon Effective Date

Proposed Effective Date: [Calendar]

Reason: Convert Rating Unit Type

Originator: mlenn

Component ID: TBD [Copy From Component Without Ratings](#) [Copy From Component With Ratings](#)

Organization: BPA

Owners: [Magnifying Glass]

Station: [Dropdown]

Equipment Type: [Dropdown]

Description: [Text]

High Nominal Voltage (kV): [Dropdown]

Low Nominal Voltage (kV): [Dropdown]

Tertiary Nominal Voltage (kV): [Dropdown]

ISO Control: Yes No

ISO Control Start Date: [Calendar]

ISO Control End Date: [Calendar]

Additional Info: [Text]

Ratings: AMP MVA MVAR MVAR

Select Organizations

Organization

- Arizona Public Service Company
- Bonneville Power Administration
- California Department of Water Resources
- Conision Federal De Electricidad
- Imperial Irrigation District
- California ISO
- Los Angeles Department of Water & Power
- Modesto Irrigation District
- Metropolitan Water District/Southern
- Northern California Power Agency
- Nevada Power Company
- Facilities Owned by Other Organizations
- Pacficorp East
- Pacficorp West
- Pacific Gas & Electric PGAE
- Southern California Edison
- San Diego Gas & Electric
- Sacramento Municipal Utility District
- Sierra Pacific Power Company
- Salt River Project
- Silicone Valley Power
- Turlock Irrigation District,
- Western Area Colorado Missouri
- Western Area Lower Colorado
- Western Area Power Agency

Figure 8. Change Request Screen

- Select the Organization from the dropdown window and the screen automatically refreshes with that organization's information.
- Select the Owners from by clicking the magnifying glass and a window listing all organizations adjacent to a checkbox loads (refer to Figure 8).
- Click the desired checkbox and press the OK button and it refreshes.
- Select the station.
- Select the Equipment Type and the screen refreshes with the specifics for that equipment.
- Type in the Description of the equipment. This is free-text, which can include up to ninety-six (96) characters.
- Select the High Nominal Voltage (kV).
- If the Low Nominal Voltage (kV) is highlighted, Then select the correct voltage and it must be less than High Nominal Voltage.
- If the Tertiary Nominal Voltage is highlighted, Then the voltage may be added and it must be less than the Low Nominal Voltage.
- Select the Yes or No radio button to designate if under ISO Control (defaults to Yes).

Transmission Register PTO Admin User Manual

ISO Control Start Date: 04/01/2007

ISO Control End Date: << April 2007 >>

Additional Info:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

26 April, 2007 Clear

Save Submit Cancel

Figure 9. Calendar Icon

- Type in, if needed, the **ISO Control Start Date**,
OR
Select by clicking on the date icon and a calendar displays (shown in Figure 9).
 - Click the desired day of the month and the calendar automatically closes.
- Select, if needed, the **ISO Control End Date** in the same manner.
- Type in any **Additional Info** using optional free-text, which can include up to 256 characters.
- Press the **Save** button.
- Press the **Submit** button and the screen in Figure 10 loads. The TR Admin then reviews and notifies the PTO Admin of approval or rejection of the Change Request via an email.

Change Request: 100150 Status: Work In Progress

Modify Request Submit Request Copy Request Close

Type: Create
Process Type: Upon Approval
Proposed Effective Date:
Reason: Convert Rating Unit Type
Originator: Marilyn Lien
Last Modified By:
Last Modified Date:

Component ID: 150081

Proposed

Organization: BPA
Owners: BPA
Last Modified Date:
Station: BASCO01
Equipment Type: BUS
Description: bus change
High Nominal Voltage (kV): 230
Low Nominal Voltage (kV):
Tertiary Nominal Voltage (kV):
ISO Control: Yes
ISO Control Start Date: 4/1/2007
ISO Control End Date:
Additional Info:

Rating Type	AMP Rating	MVA Rating	MVA High	MVA Low	Duration	Notes

* MVA ratings are either entered directly by the PTO or calculated using the PTO AMP Rating with the following equation: $[MVA = (KV * AMP * 1.732) / 1000]$. This rating applies for all equipment except for Shunt Reactive Devices where the values are in MVAR instead of MVA.

Figure 10. Change Request Work In Progress (Mock Up)

3. Requests Page

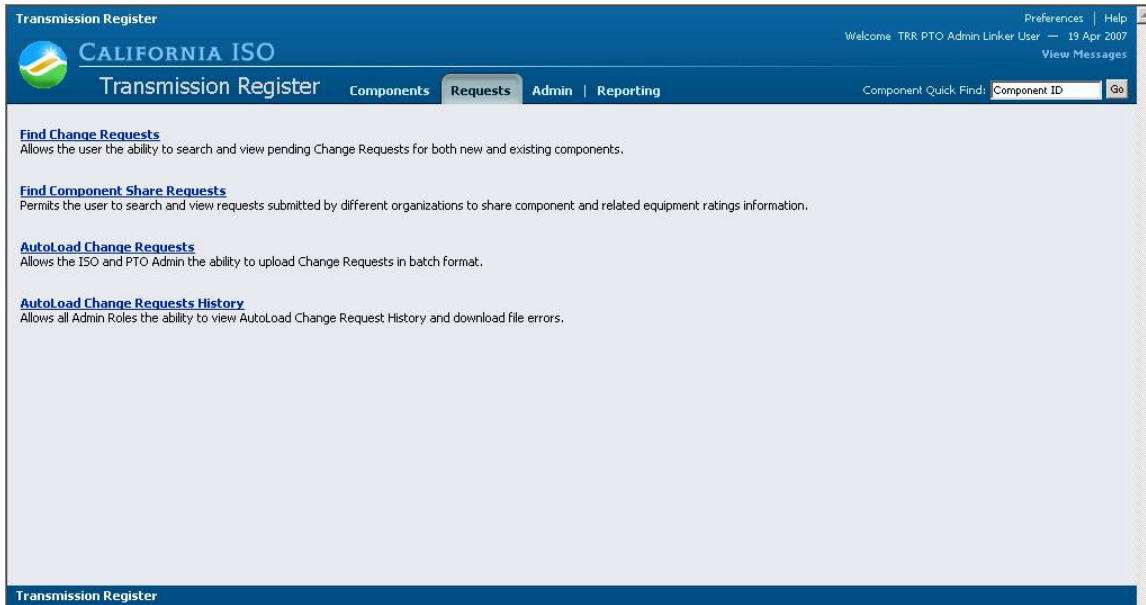


Figure 11. Requests Page

Select the Requests folder tab and the Requests page (shown in Figure 11) offers the PTO Admin the ability to perform the following:

- **Find Change Requests**- Search and view pending Change Requests for new and existing components.
- **Find Component Share Requests**- Find a component that is shared by another Organization.
- **AutoLoad Change Requests**- Uploads bulk Change Requests into TR.
- **AutoLoad Change Requests History**- View all the Change Requests pending approval.

The subsequent subsections offer steps to complete the each of the above-mentioned tasks on the Requests page.

3.1. Find Change Requests

Figure 12. Find Change Requests Page

Under the Find Change Requests topic, the user can search for Change Requests on new or existing components using either specific criteria or by general category type. For example, if we choose the Reason as Transmission Line/Facility Reconfigured (Physically Changed), and then select the Status Approved, we get back six pages of approved Change Requests that pertain the that reason type. However, for guidance purposes, we will proceed step-by-step as if all the criteria is identified:

Reminder: The parameter for all search options automatically defaults to Equal to.

- Click the [Find Change Requests](#) hyperlink shown in Figure 11 and the screen in Figure 12 loads.
- Select the following criterion from the dropdown windows.
 - Reason
 - Organization
 - Originator
 - Status – Defaults to “Pending Approval”.
- Type in the Date Created,
OR
Press the calendar icon and select a date. Once the date is selected the window automatically closes.
- Select the appropriate Date Created parameter if different than “Equal to”.
- Type in the Date Approved,
OR
Press the calendar icon and select a date.

Transmission Register PTO Admin User Manual

- Select the appropriate Date Approved parameter if different than Equal to.
- Type in the Component ID. If only a partial number is available, you can select the parameter of either “Contains” or “Starts with”.
- Select the High Nominal Voltage (kV) and the associated parameter (defaults to “Equal to”).
- Select the Equipment Type.
- Select the Station name.
- Choose either Yes or No as to whether the component is Under ISO Control.
- Select AUTOLOAD as the Request Source, which outputs below the Search Results at the bottom of the page. Refer to the Figure 12 Search Results.

Type of Change	Change Request Reason	OID	Org	Owner	Station Name	Component Description	Component Type	High KV	Low KV	Tertiary KV	Length	ISO Control	Units	Additional Information	Line Number	Rating Type	High Rating	Low Rating	Duration	Note #	
create	New GRID Asset (Facility Previously non-Existing Until New Construction)		PLUD	PLUD	AMADOR	BSCB 1	BSCB	230				Y	AMPS								
update	Revised Ratings (Equipment Physically Unchanged)	95668	PLUD	PLUD	AMADOR	NORTH	BUS	70				Y	AMPS			WE (C)	2900			0	
retire	Other (Causes not covered in above listing)	95669	PLUD	PLUD	AMADOR	SOUTH	BUS	69				Y	AMPS								
create	New GRID Asset (Facility Previously non-Existing Until New Construction)		PLUD	PLUD	AMADOR	NEW 1	FUSE	69				Y	AMPS								

Figure 13. Sample Excel .csv Format

The user can export to a .csv format by:

- **Click** the [CSV Export](#) hyperlink shown in Figure 12 and the spreadsheet in Figure 13 generates.

To view the details of one line of the Search Results:

- **Click** the Details View hyperlink shown in Figure 12 and the Change Request in Figure 14 loads.
- **Press** the Close Button when complete.

Change Request: 100400 Status: Approved

Type: Create
 Process Type: Upon Approval
 Proposed Effective Date: 6/5/2007
 Reason: Facility Added (Facility Previously Existing but Not in Registry)
 Originator: TRS AUDIT_3
 Approver: Tom Halford
 Approver Notes:
 Last Modified By: Tom Halford
 Last Modified Date: 06/05/2007 2:40 PM

Component ID: 150005

Proposed
 Organizations: SDGE
 Owners: CFE
 Last Modified Date: 6/5/2007
 Station: [TRANSMISSION LINE]
 Equipment Type: TL
 Description: Mexico-San Diego
 High Nominal Voltage (kV): 1000
 Low Nominal Voltage (kV): 2.4
 Tertiary Nominal Voltage (kV):
 ISO Control: No
 ISO Control Start Date:
 ISO Control End Date:
 Additional Info:
 Length: 106
 Line #:

Rating Type	AMP Rating	MVA Rating	MVAR High	MVAR Low	Duration	Notes

* MVA ratings are either entered directly by the PTO or calculated using the PTO AMP Rating with the following equations: $MVA = (KV * AMPS * 1.732) / 1000$. This rating applies for all equipment except for Shunt Reactive Devices where the values are in MVAR instead of MVA.

Rating Notes
 Note Id: Note
 No Notes Assigned

Close

Figure 14. Details View Window

3.2. Find Share Components

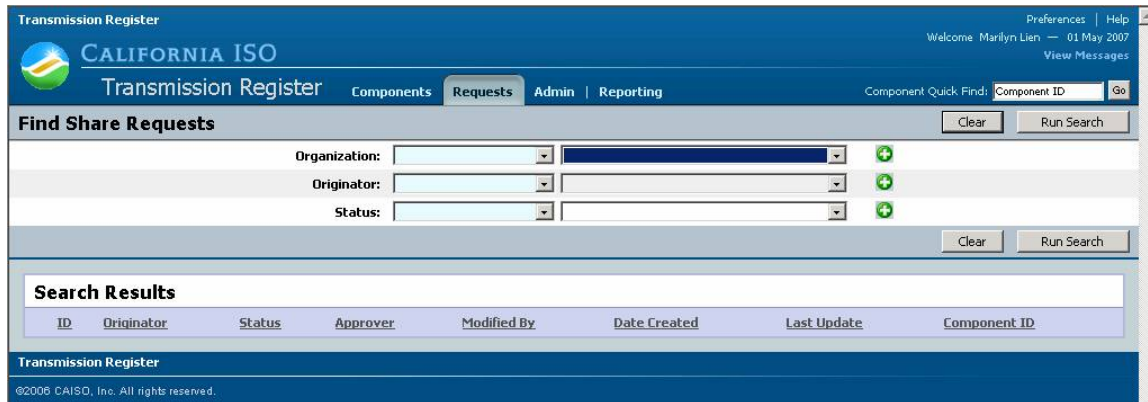


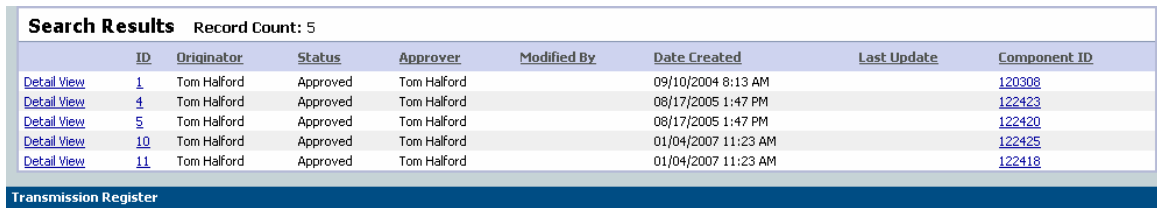
Figure 15. Find Share Requests

The Find Share Requests page permits the user to search and view requests submitted by different organizations that share their component and related equipment ratings information. One or all the criterion can be selected, but for training purposes, we will select all.

Take the following steps to Find Share Components:

Reminder: The parameter for all search options automatically defaults to Equal to.

- Click the [Find Share Requests](#) hyperlink shown in Figure 11 and the window in Figure 15 loads.
- Select the Organization.
- Select the Originator.
- Select the Status.
- Press the Run Search button and the screen in Figure 16 loads.



	ID	Originator	Status	Approver	Modified By	Date Created	Last Update	Component ID
Detail View	1	Tom Halford	Approved	Tom Halford		09/10/2004 8:13 AM		120308
Detail View	4	Tom Halford	Approved	Tom Halford		08/17/2005 1:47 PM		122423
Detail View	5	Tom Halford	Approved	Tom Halford		08/17/2005 1:47 PM		122420
Detail View	10	Tom Halford	Approved	Tom Halford		01/04/2007 11:23 AM		122425
Detail View	11	Tom Halford	Approved	Tom Halford		01/04/2007 11:23 AM		122418

Figure 16. Find Share Requests Results

The PTO Admin may now modify the share permissions for their organization:

- Click the [Detail View](#) hyperlink and the window shown in Figure 17 loads.

Transmission Register PTO Admin User Manual

Share Request: 1 Status: Approved

Type: Create
Originator: Tom Halford
Approver: Tom Halford

Approver Notes:

Last Modified By:
Last Modified Date:

Share ID: 2
Shared Organization: EED
Share Type: View

Component ID: 120308

Organization: PLUD High Nominal Voltage (kV): 500 (Operating: 500) Additional Info: Ratings changed to reflect EED recalculation to reflect summer preloading and reduce loading time to .5hr.

Owners: PLUD Low Nominal Voltage (kV): Pending Request:
Effective Date: 08/24/2004 Tertiary Nominal Voltage (kV): Pending Share Request:

Last Modified Date: 06/14/2005 ISO Control: Yes Length: 82.89
Station: [TRANSMISSION LINE] ISO Control Start Date: 12/09/2004 Line Number: N/A
Equipment Type: TLS ISO Control End Date:

Description: SLY PARK-PLACER

* MVA ratings are either entered directly by the PTO or calculated using the PTO AMP Rating with the following equation: $[MVA = (kV * AMPS * 1.732) / 1000]$. This rating applies for all equipment except for Shunt Reactive Devices where the values are in MVAR instead of MVA.

ID	Share Type	Organization	Remove Share	Modify Share
2	View Only	EED	Remove Share	Modify Share

Figure 17. Share Request Page

- If the share needs to be removed, Then click the Remove Share hyperlink shown in Figure 17. The screen refreshes and now includes a [Cancel Request](#) hyperlink at the top of the page to cancel the change.
- If the share needs to be modified, Then click the Modify Share hyperlink and the screen shown in Figure 18 loads.

Share Request

Type: Modify

Component Share: 120308

Shared Organization: EED

Share Type: View Only View And Link

Originator: TRR PTO Admin Linker User

Component ID: 120308

Organization: PLUD
Owners: PLUD
Effective Date: 08/24/2004
Last Modified Date: 06/14/2005 10:36 AM
Station: [TRANSMISSION LINE]
Equipment Type: TLS
Description: SLY PARK-PLACER
High Nominal Voltage (kV): 500
Low Nominal Voltage (kV):
Tertiary Nominal Voltage (kV):
ISO Control: Y
ISO Control Start Date: 12/09/2004 12:00 AM
ISO Control End Date:
Additional Info: Ratings changed to reflect PG&E (Rick Gavazza) recalculation to reflect summer preloading and reduce loading time to .5hr.

Rating Type	AMP Rating	MVA Rating	MVar High	MVar Low	Duration	Notes
SN (N)	2230	1931.18			C	
SE (A)	3556	3079.5			0.5	
WN (B)	3962	3431.09			C	
WE (C)	4254	3683.96			4	
D	2478	2145.95			C	
E	2964	2566.82			4	

Figure 18. Modify Share Request Page

The modification on this page changes the Share Type from View Only to View And Link.

- Click the View And Link radio button.
- Press the Save button.
- Press the Submit or Cancel button.

3.3. AutoLoad Change Requests and AutoLoad Change Requests History

The AutoLoad Change Requests page allows the ISO and PTO Admin the ability to upload Change Requests in batch format. For steps to perform this, refer to the [Transmission Register AutoLoader User Manual](#).

The AutoLoad Change Requests History page allows the TR Admin the ability to view AutoLoad Change Request History and download file errors. For steps to use this feature together with the AutoLoader application, refer to Section 3.4. of the [Transmission Register AutoLoader User Manual](#).

Both of these tools are accessed from the Requests page under the [AutoLoad Change Requests](#) and [AutoLoad Change Requests History](#) shown in Figure 11.

4. Admin Screen



Figure 19. Admin Screen

The PTO Administrators can view organization-specific users, and proprietary rating types and rating notes, along with their IDs. By selecting the Admin folder tab, the screen in Figure 19 appears. The following subsections offer steps to view Users, Rating Types, and Rating Notes.

4.1. Users

Users						
	User ID	Logon ID	Organization	Email	Last Logon	Status
View User	1	TRSYSTEM				Active
View User	50	aamark	California ISO	aamark@caiso.com		Active
View User	1015	amann	California ISO	amann@caiso.com		Active
View User	55	agilfoy	California ISO	agilfoy@caiso.com		Active
View User	59	abhaumik	California ISO	abhaumik@caiso.com		Active

Figure 20. Users Screen

- Click on the [Users](#) hyperlink shown in Figure 19 and the screen in Figure 20 loads.
- Click on either the [View User](#) or User ID hyperlink to view details of a particular individual's permission status and role.

4.2. Rating Types

Rating Types						
	Rating Type ID	Short Name	Full Name	Description	Sort Priority (Major)	Sort Priority (Minor)
View Rating Type	1	SN (N)	Summer Normal	Summer Normal (April - October): Summer loading limit under typical normal continuous operating conditions. Will be used as MVA1 in the Detailed Network Model.	1	0
View Rating Type	2	SE (A)	Summer Emergency	Summer Emergency (April - October): Summer emergency loading limit. Will be used as MVA2 in the Detailed Network Model.	2	0
View Rating Type	3	WN (B)	Winter Normal	Winter Normal (November - March): Winter loading limit under typical normal continuous operating conditions. Will be used as MVA3 in the Detailed Network Model.	3	0
View Rating Type	4	WE (C)	Winter Emergency	Winter Emergency (November - March): Winter emergency loading limit. Will be used as MVA4 in the Detailed Network Model.	4	0

Figure 21. Rating Types Screen

Rating Types are an organization's standard description of an industry common operating condition that an electrical component would be subjected to when in an energized state (e.g. Winter Normal, Summer Normal).

- Click on the [Rating Types](#) hyperlink shown in Figure 19 and the screen in Figure 21 loads.
- Click the [View Rating Type](#) or Rating Type ID hyperlink to view the details of a rating type, and the example shown in Figure 22 loads.

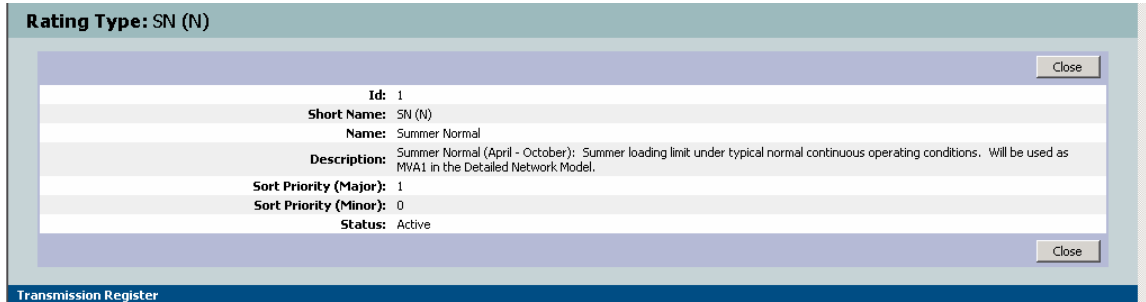


Figure 22. Rating Type Details

4.3. Rating Notes

ID	Organization	Note ID	Note
204	Placer Lake Utility District	203	Continuous rating at 80 degree F ambient temperature.
203	Placer Lake Utility District	202	Continuous rating at 90 degree F ambient temperature.
202	Placer Lake Utility District	201	Emer. limit is a cont. limit, limited to 1000 hrs over its lifetime. Load recordings should be made and retained whenever load exceeds its normal rating for 30 min. or more. Recording info should be forwarded to Tran. Operations & Tran. Eng annually.

Figure 23. Rating Notes Screen

Rating Notes are an organization's detailed operating constraint that is in addition to or reaffirms an electrical component's Rating Type information. The note typically informs the operator what additional constraint has been applied to the Rating Type (e.g. Limited by Ground Clearance, Limited by Disconnect).

- Click on the [Rating Notes](#) hyperlink shown in Figure 19 and the screen in Figure 23 loads.
- Click on the ID hyperlink (refer to Figure 23) to view details of a specific rating note and the example shown in Figure 24 loads.

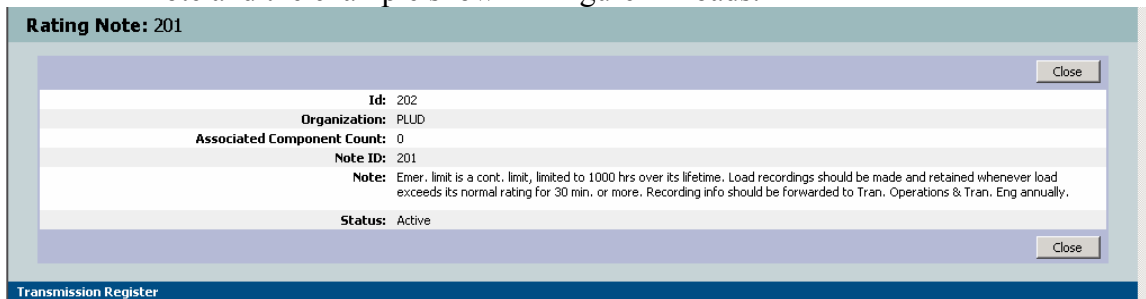


Figure 24. Rating Note Details

5. Reporting Screen

Refer to the [Transmission Register CAISO & PTO General User Manual](#) for a description of all available reports, as well as, steps to generate a report.

6. Revision History

Version	Activity	By	Date
1.0	Draft	Marilyn Lien	5/1/07