



Enabling Demand Response: Registration System Enhancements Phase 2

Pre-Market Simulation Training Session
August 18, 2016

Radha Madrigal
External Training Team

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.

Agenda



- Terms and acronyms
- Review business process changes
- Review Demand Response Registration System
- Create location and registration
- Notifications
- Changes to Demand Response System

Terms and Acronyms

Terms and acronyms

Demand Response Provider (DRP)

Load Serving Entity (LSE)

Utility Distribution Company (UDC)

Locations

- Physical location of the demand response entity
- Includes customer data such as service account number, physical service address, etc.
- Uniquely identified by service account number and UDC
- Submitted for review by LSE and UDC

Terms and acronyms

PDR/RDR Resource ID

- Select from available list of IDs during registration
- One ID per registration
- Unique ID used for participation in the ISO wholesale markets (scheduling/bidding and settlement)
- Resource specific information for the ID resides in the ISO master file

Registration

- May be comprised of a single location or many locations

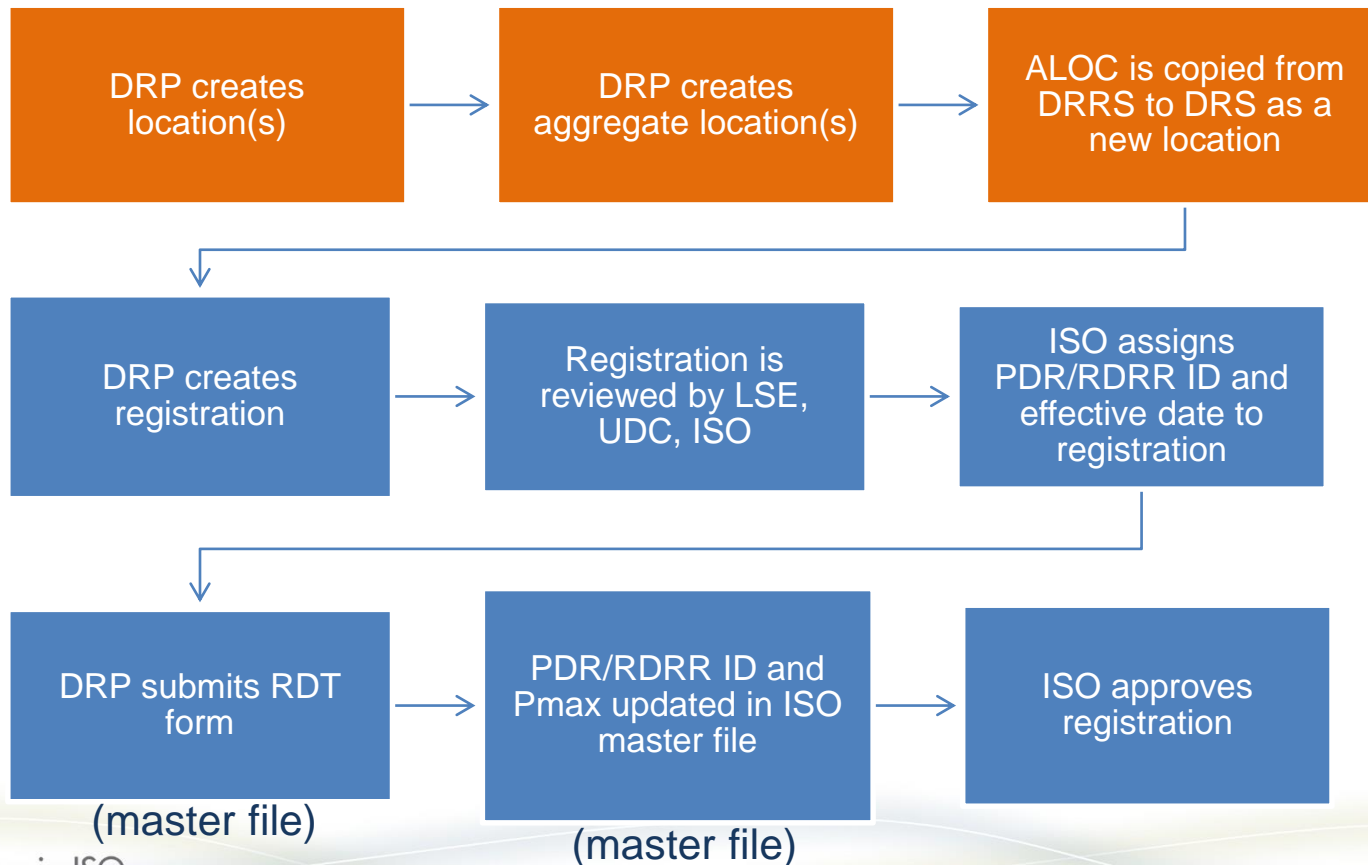
Service Account Number (SAN)

- Unique number assigned to a location by the UDC

Review Business Process Changes

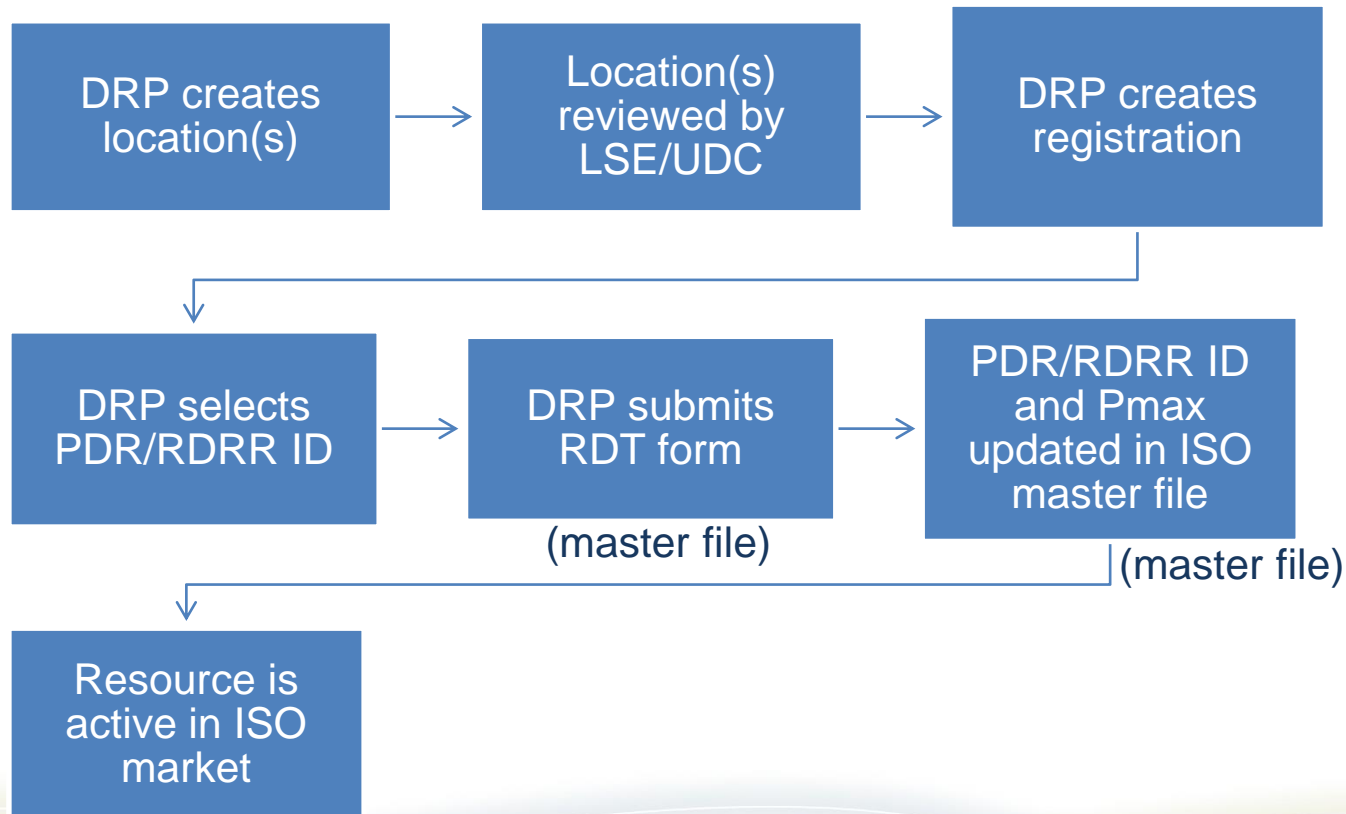
As-is business process

- Locations and aggregate locations are created in the Demand Response Registration System (DRRS) via user interface or API
- Locations are registered, reviewed, verified, and approved in the Demand Response System (DRS) via user interface



To-be business process

- Locations are created in the Demand Response Registration System (DRRS) via user interface or API
- Locations are reviewed and registered in the Demand Response Registration System (DRRS) via user interface or API



What has changed?

Application functionality has been streamlined

Removed aggregate location “ALOC” concept

Registration function has been moved from DRS to DRRS

PDR/RDRR resource rules have been implemented in master file

Demand response capability will be determined by Pmax value in master file

To be addressed in the future

A future phase will address and enhance:

- Meter data management
- Baseline calculations
- Settlements functionality

Implementation date to be determined

Review Demand Response Registration System (DRRS)

DRRS functionality

Application access

Review role-based tabs

Review screen layouts and buttons

- Locations
- Registrations

Walk through process of creating location and registration

- Create new location
- UDC and LSE review location
- Create registration

Notifications

Application access

No new roles are being implemented as part of phase 2 – if user(s) already have access, no change is needed

Work with your user access administrator (UAA) to obtain new access to DRRS

- Access to DRRS is managed using the Access and Identity Management (AIM) application
- Submit requests for access to DRRS in market simulation and production environments

Request DRS access if you do not have it today

- DRS is a legacy application; access is managed using the Application Access Request Form (AARF)

Application access

- Users must be provisioned for access to staging environment in order to participate in market simulation



California ISO

Market Applications

[Market Participant Portal
CAISO.com](http://MarketParticipantPortal.CAISO.com)

MAP-STAGE

Application Access



AIM

Access and Identity Management

Inquiries & Disputes



CIDI

Customer Inquiry Dispute and Information

Market & Operations



CMRI

Customer Market Results Interface



CRR

Congestion Revenue Rights



SIBR

Scheduling Infrastructure & Business Rules



SIBR Reports

Scheduling Infrastructure & Business Rules Reports

Metering



OMAR

Operational Meter Analysis & Reporting

OASIS



OASIS

Open Access Same-Time Information System

Outage Coordination



WebOMS

Outage Management System

Reliability Requirements



CIRA

Customer Interface for Resource Adequacy



RAAM

Resource Adequacy Availability Management

Renewables & Demand Response



DRS

Demand Response System



DRRS

Demand Response Registration System



PIRP

Participating Intermittent Resource Program

Settlements



MRI-S

Market Results Interface - Settlements

Systems & Resource Modeling



TR

Transmission Registry



Master File



RIMS

Resource Interconnection Management System



RIMSG

Resource Interconnection Management System - Generation

Review of DRRS application



Role-based
tabs

Screen
layouts and
buttons

Role-based tabs

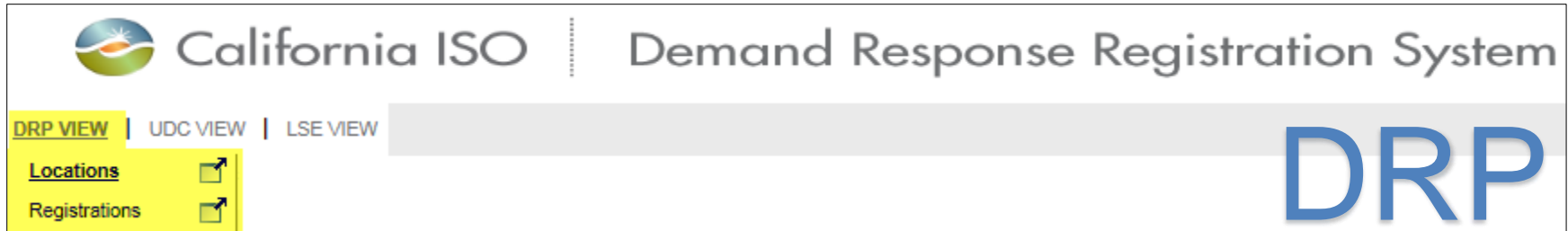
Users will see one or more tabs based on their role(s)

- DRP VIEW (create locations and registrations)
- UDC VIEW (review locations and view registrations)
- LSE VIEW (review locations and view registrations)

Each tab has two items



- Locations
- Registrations

Role-based tabs

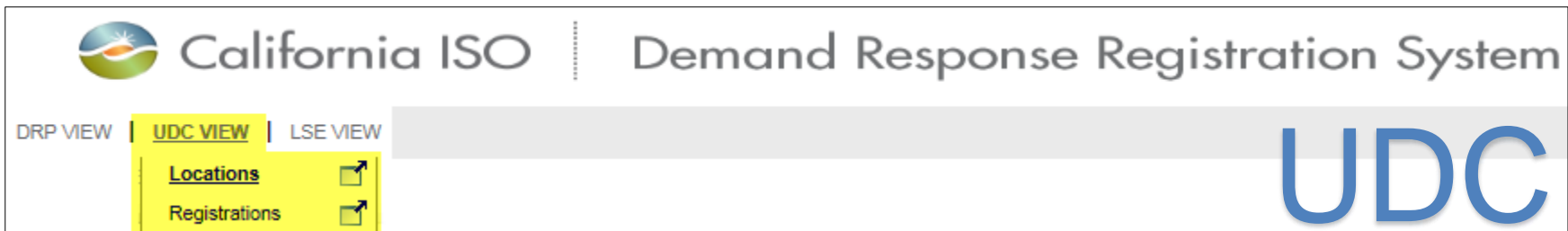


California ISO | Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW



Locations 
Registrations 

DRP



California ISO | Demand Response Registration System

DRP VIEW | **UDC VIEW** | LSE VIEW



Locations 
Registrations 

UDC



California ISO | Demand Response Registration System

DRP VIEW | UDC VIEW | **LSE VIEW**

Locations 
Registrations 

LSE

Role-based tabs

Users with multiple roles should select the tab that corresponds with the function they are performing at that moment

For example, select UDC VIEW to see all locations that are assigned to you as the UDC

Layout of Locations screen (DRP view)

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Locations

LOC ID [] LOC Name [] SAN [] DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL] Apply Reset

Create Copy Delete Defend Withdraw Edit End Date Register

Locations

Select Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Status
<input checked="" type="checkbox"/>	541361							06/23/2016	07/31/2018	Pending
<input type="checkbox"/>	541322							06/27/2016	07/30/2018	Pending
<input type="checkbox"/>	541282							07/16/2018	09/16/2018	Pending
<input type="checkbox"/>	541221							06/20/2016	06/20/2016	Withdrawn
<input type="checkbox"/>	541203							06/20/2016	06/23/2016	End Dated
<input type="checkbox"/>	541202							06/21/2016	06/30/2017	Disputed
<input type="checkbox"/>	541163							07/16/2017	09/16/2017	Active
<input type="checkbox"/>	541162							07/16/2017	09/16/2017	Active
<input type="checkbox"/>	541161							07/16/2017	09/16/2017	Inactive
<input type="checkbox"/>	541123							06/16/2016	06/16/2017	Inactive
<input type="checkbox"/>	541122							05/31/2016	05/31/2016	Withdrawn
<input type="checkbox"/>	541081							05/23/2016	05/31/2017	Active

- All locations are shown here
- Use check box to select an individual location and more information will display in the other sections

Registrations

Reg Id	Reg Name	Start Date	End Date	Status

Location Address

Address 1	Address 2	City	State	Zip	Type
Outcropping Way		Folsom	CA	95630	

Location Review Details

LSE Approved	LSE Comments	LSE Reviewer	LSE Contact Info	UDC Approved	UDC Comments	UDC Reviewer	UDC Contact Info

Location Defend Details - Incumbent

Name	Contact Info	Comments

Location Defend Details - Prospective

Name	Contact Info	Comments

Locations screen: Buttons available to DRP



California ISO

Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Locations

LOC ID LOC Name SAN DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL]

Create

Copy

Delete

Defend

Withdraw

Edit

End Date

Register

- Create: Used when a location is being created for the first time
- Copy: Ability to copy a previously created location
- Delete: Actionable for certain location statuses
- Defend: Use this button when a location is determined to be a duplicate (i.e. SAN is being used by another DRP)
- Withdraw: Use when a location has been submitted for review but not completed the review process
- Edit: Make changes to a location (editable fields will depend on the status of the location)
- End date: Actionable for certain location statuses
 - Use this button if today is the end date
 - Use Edit button to end date a location for a date other than today
- Register: Select location(s) from the list and click register to create registration

Layout of Locations screen (UDC and LSE view)

LOC ID: LOC Name: SAN: DRP: [ALL] UDC: [ALL] LSE: [ALL] SUBLAP: [ALL] Apply Reset

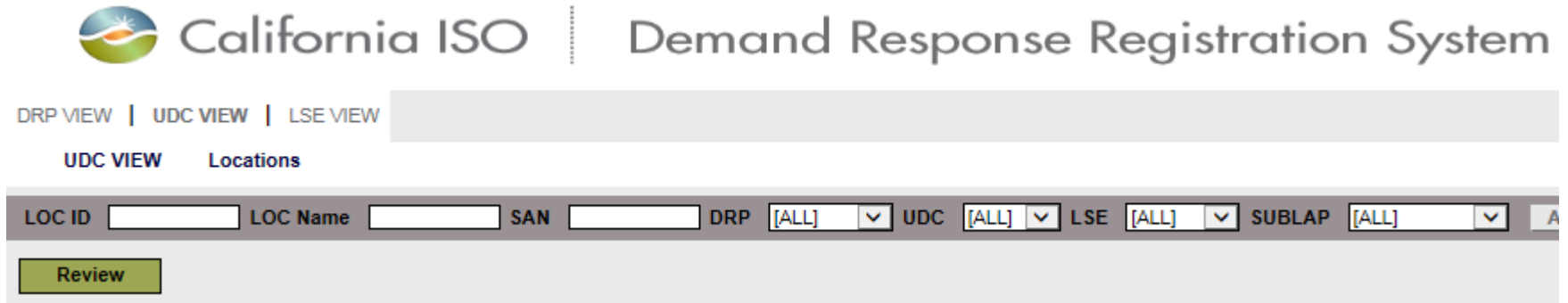
Locations												Registrations									
Select	Loc ID	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Review Start	Review End	Status	UDC Reviewed	Reviewer Name	Reviewer Contact	Reg Id	Reg Name	Start Date	End Date	Status
<input checked="" type="checkbox"/>	541351										6/23/2016	06/24/2016	Pending								
<input type="checkbox"/>	541322										6/23/2016	06/23/2016	Pending								
<input type="checkbox"/>	541292										6/17/2016	07/01/2016	Pending								
<input type="checkbox"/>	541222										6/17/2016	07/01/2016	Pending								
<input type="checkbox"/>	541221										6/17/2016	07/01/2016	Withdrawn								
<input type="checkbox"/>	541203										6/17/2016	07/01/2016	End Dated	Y							
<input type="checkbox"/>	541202										6/17/2016	07/01/2016	Disputed	N	SS	9163512319					

- All locations are shown here
- Use check box to select an individual location and more information will display in the other sections

Location Address					
Address 1	Address 2	City	State	Zip	Type
Outcropping Way		Folsom	CA	95620	

UDC & LSE

Locations screen: Buttons available to UDC and LSE



California ISO | Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

UDC VIEW Locations

LOC ID LOC Name SAN DRP [ALL] ▼ UDC [ALL] ▼ LSE [ALL] ▼ SUBLAP [ALL] ▼

Review

- Review button allows UDC and LSE to review locations submitted by the DRP

UDC & LSE

Layout of Registrations screen (DRP view)

California ISO Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW | ADMINISTRATION

DRP VIEW Registrations

Reg ID [] Reg Name [] DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL] Apply Reset

Create Edit Copy Terminate Delete

Registrations

1 - 10 of 122

Select Reg ID	Name	DRP	UDC	LSE	SUBLAP	DLAP	DRP SC	Resource ID	Resource Type	Program	Baseline Method	Start Date	End Date	Status
<input checked="" type="checkbox"/> 542945									Pre Defined	Proxy DR	10 In 10 with SMA	01/01/2018	01/02/2018	New
<input type="checkbox"/> 542946									Pre Defined	Reliability DR	10 In 10 with SMA	01/01/2018	01/02/2018	New
<input type="checkbox"/> 542923									Custom	Proxy DR	10 In 10 with SMA	04/01/2017	08/10/2017	Confirmed
<input type="checkbox"/> 542909									Pre Defined	Reliability DR	10 In 10 with SMA	01/01/2018	01/02/2018	Confirmed
<input type="checkbox"/> 542890									Pre Defined	Reliability DR	10 In 10 with SMA	01/02/2018	01/04/2018	Terminated
<input type="checkbox"/> 542888									Pre Defined	Proxy DR	10 In 10 with SMA	01/01/2018	01/05/2018	Terminated
<input type="checkbox"/> 542884									Pre Defined	Reliability DR	10 In 10 with SMA	01/01/2018	01/05/2018	Terminated
<input type="checkbox"/> 542882									Pre Defined	Reliability DR	10 In 10 with SMA	01/01/2018	01/05/2018	Terminated
<input type="checkbox"/> 542866									Custom	Proxy DR	10 In 10 with SMA	08/09/2016	08/12/2016	Confirmed
<input type="checkbox"/> 542862									Pre Defined	Reliability DR	10 In 10 with SMA	01/01/2018	01/05/2018	Terminated

- All registrations are shown here
- Use check box to select an individual registration and the associated location(s) will display in the section below

Locations

Loc ID	SAN	Resource ID	Start date	End date	Distribution Factor	
542748000001	Test_API_RD_23		01/01/2018	01/05/2018	0	View Location

Registrations screen: Buttons available to DRP

California ISO | Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Registrations

Reg Id Reg Name DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL]

- Create: Used when a registration is being created for the first time
- Edit: Make changes to a registration (editable fields will depend on the status of the registration)
- Copy: Ability to copy a previously created registration
- Terminate: Allows the DRP to delete a registration
- Delete: Allows the DRP to delete a registration that has a status of **New**

Layout of Registrations screen (UDC and LSE view)

Reg Id Reg Name DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL] Apply Reset

Registrations														
Reg ID	Name	DRP	UDC	LSE	SUBLAP	DLAP	DRP SC	Resource ID	Resource Type	Program	Baseline Method	Start Date	End Date	Status
543081									Pre Defined	Proxy DR	10 in 10 with SMA	01/21/2018	01/25/2018	Terminated
543067									Pre Defined	Proxy DR	10 in 10 with SMA	01/16/2018	01/20/2018	Confirmed
543085									Pre Defined	Proxy DR	10 in 10 with SMA	01/11/2018	01/15/2018	Terminated
543083									Pre Defined	Proxy DR	10 in 10 with SMA	01/08/2018	01/10/2018	Confirmed
543043									Pre Defined	Proxy DR	10 in 10 with SMA	01/01/2018	01/02/2018	Confirmed
543041									Pre Defined	Proxy DR	10 in 10 with SMA	01/01/2018	01/02/2018	Terminated
543027									Pre Defined	Proxy DR	10 in 10 with SMA	08/12/2016	08/28/2016	Confirmed
543025									Custom	Proxy DR	10 in 10 with SMA	08/12/2016	08/14/2016	Terminated
543023									Custom	Proxy DR	10 in 10 with SMA	08/30/2016	08/30/2016	Terminated
543021									Custom	Proxy DR	10 in 10 with SMA	08/15/2016	08/18/2016	Confirmed

- All registrations are shown here
- Click on a registration and the location information will be shown below, along with a View Location button

Locations					
Loc ID	SAN	Resource ID	Start date	End date	Distribution Factor
542914000002	Test_API_RD_35	12345680880	01/01/2018	01/25/2018	1

[View Location](#)

- Note: There are no top level buttons available to the UDC or LSE
- Registration section is view-only for these roles

UDC & LSE

DRRS: Create Location and Registration

Walk through process of creating location and registration



Create new location

- Functionality for DRP only



DRP VIEW | UDC VIEW | LSE VIEW

Locations
Registrations

Select **Locations** from the **DRP VIEW** Tab

[ALL] SUBLAP [ALL]



DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW **Locations**

LOC ID [] LOC Name [] SAN [] DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL]

Create Copy Delete Defend Withdraw Edit End Date Register

Locations

Click **Create**

Create new location



California ISO

Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Create New Locations

Create New Location

Name*	<input type="text"/>	Address 1*	<input type="text"/>
SAN*	<input type="text"/>	Address 2	<input type="text"/>
Start Date*	<input type="text" value="31"/>	City*	<input type="text"/>
End Date*	<input type="text" value="31"/>	State*	California <input type="button" value="v"/>
DRP*	<input type="text" value="v"/>	Zip*	<input type="text"/>
UDC*	<input type="text" value="v"/>	Address Type	<input type="text"/>
LSE*	<input type="text" value="v"/>		
SUBLAP*	<input type="text" value="v"/>		
PNODE	<input type="text" value="v"/>		

- Required fields are marked with an asterisk
- Choices in **SUBLAP** field are determined by **Start Date/End Date**
- **PNODE** is required if creating a registration for a custom resource
- **Save** will save in draft mode
- **Submit** will send to UDC/LSE for review

Create new location: Save button

- Status will be set to **New** when location is saved

LOC ID LOC Name SAN DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL]

Locations

1 - 30 of 80

Select Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Status
<input type="checkbox"/> 541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD		07/01/2016	06/30/2017	New

Create new location: Submit button

- Status will be set to **Pending** when location is submitted
- Notification will be sent to UDC and LSE

The screenshot displays the California ISO Demand Response Registration System interface. At the top, the logo for California ISO is on the left, and the text "Demand Response Registration System" is in the center. To the right of the text are navigation icons including a left arrow, a right arrow, a stop button, a refresh button, a search button, a settings gear, and a right arrow. Below the header, there are tabs for "DRP VIEW", "UDC VIEW", and "LSE VIEW". Under "DRP VIEW", there is a sub-tab for "Locations". A search bar contains fields for "LOC ID", "LOC Name", "SAN", "DRP" (with a dropdown menu set to "[ALL]"), "UDC" (with a dropdown menu set to "[ALL]"), "LSE" (with a dropdown menu set to "[ALL]"), and "SUBLAP" (with a dropdown menu set to "[ALL]"). There are "Apply" and "Reset" buttons to the right of the search fields. Below the search bar is a row of action buttons: "Create", "Copy", "Delete", "Defend", "Withdraw", "Edit", "End Date", and "Register". The main content area is titled "Locations" and includes a toolbar with a search icon, a list view icon, a print icon, and navigation arrows. Below the toolbar is a table with the following columns: "Select Loc Id", "Name", "SAN", "DRP", "UDC", "LSE", "SUBLAP", "PNODE", "Start Date", "End Date", and "Status". The table contains one row with the following data: "541406", "Example for training - rkm", "123456", "DABC", "UABC", "LABC", "SLAP_ABCD", "07/01/2016", "06/30/2017", and "Pending". The "Pending" status is circled in red.

Select Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Status
<input type="checkbox"/> 541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD		07/01/2016	06/30/2017	Pending

Location review by UDC

The screenshot displays the California ISO Demand Response Registration System interface. At the top, there are navigation tabs for 'DRP VIEW', 'UDC VIEW', and 'LSE VIEW', with 'UDC VIEW' selected. Below this, there are search filters for 'LOC ID', 'LOC Name', 'SAN', 'DRP', 'UDC', 'LSE', and 'SUBLAP', each with a dropdown menu set to '[ALL]'. A 'Review' button is highlighted with an orange circle. A text box with the text 'Click Review' is also present. Below the filters is a table of locations. The first row is selected and highlighted in blue. Below the table is a 'Location Address' section with fields for 'Address 1', 'Address 2', 'City', 'State', 'Zip', and 'Type'.

Select Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Review Start	Review End	Status	UDC Reviewed Name	Reviewer Contact
<input checked="" type="checkbox"/>	541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD	07/01/2016	06/30/2017	06/23/2016	06/24/2016	Pending		

Address 1	Address 2	City	State	Zip	Type
250 Outcropping Way		Folsom	CA	95630	

- Location created by DRP is selected using check box
- Note the review start and review end dates and the status of the location
- Click Review

Location review by UDC



California ISO

Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

UDC VIEW Confirm Review Locations

Locations To Be Reviewed

1 - 1 of 1

ID	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Location Status
541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD		07/01/2016	06/30/2017	Pending

Valid Location

Reviewer Name

Phone

Review Comment

- **Reviewer Name** and **Phone** are required fields
- **Review Comment** is required if **Valid Location** box is not checked

Are you sure you want to Submit the Review for above Locations?

Cancel

Continue

Location review by UDC

Review

Locations

1 - 10 of 97

Select Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Review Start	Review End	Status	UDC Reviewed	Reviewer Name	Reviewer Contact
<input type="checkbox"/> 541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD		07/01/2016	06/30/2017	06/23/2016	06/24/2016	Pending	Y	UDC Reviewer	916-351-4400

Location Address

Address 1	Address 2	City	State	Zip	Type
250 Outcropping Way		Folsom	CA	95630	

- Status is still pending because LSE needs to review, but you can see that UDC Reviewed is set to Yes and the name & contact number are filled out

Location review by LSE

The screenshot displays the California ISO Demand Response Registration System interface. At the top, the logo and title are visible. Below the navigation bar, there are tabs for 'DRP VIEW', 'UDC VIEW', and 'LSE VIEW', with 'LSE VIEW' selected. The main content area shows a search bar with fields for 'LOC ID', 'LOC Name', 'SAN', 'DRP', 'UDC', 'LSE', and 'SUBLAP'. A 'Review' button is highlighted with an orange circle. A text box with the text 'Click Review' is overlaid on the interface. Below the search bar, there is a table of locations. The first row is selected and highlighted in blue. Below the table, there is a section for 'Location Address' with fields for 'Address 1', 'Address 2', 'City', 'State', 'Zip', and 'Type'.

California ISO Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

LSE VIEW Locations

LOC ID: [] LOC Name: [] SAN: [] DRP: [ALL] UDC: [ALL] LSE: [ALL] SUBLAP: [ALL] Apply Reset

Review Click Review

Select	Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Review Start	Review End	Status	LSE Reviewed	Reviewer Name	Reviewer Contact
<input checked="" type="checkbox"/>	541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD		07/01/2016	06/30/2017	06/23/2016	06/24/2016	Pending			

Location Address

Address 1	Address 2	City	State	Zip	Type
250 Outcropping Way		Folsom	CA	95630	

- Location created by DRP is selected, you see the address info in the bottom section
- Click Review

Location review by LSE



California ISO

Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

LSE VIEW Confirm Review Locations

Locations To Be Reviewed

1 - 1 of 1

ID	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Location Status
541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD		07/01/2016	06/30/2017	Pending

Valid Location

Reviewer Name

Phone

Review Comment

Are you sure you want to Submit the Review for above Locations?

Cancel

Continue

- **Reviewer Name** and **Phone** are required fields
- **Review Comment** is required if **Valid Location** box is not checked

Location review completed

The screenshot displays the California ISO Demand Response Registration System interface. At the top, there are navigation tabs for 'DRP VIEW', 'UDC VIEW', and 'LSE VIEW', with 'LSE VIEW' selected. Below this, there are filter dropdowns for 'LOC ID', 'LOC Name', 'SAN', 'DRP', 'UDC', 'LSE', and 'SUBLAP', all set to '[ALL]'. A 'Review' button is visible. The main table, titled 'Locations', shows a list of locations. The first row is selected and highlighted in blue, with the 'Status' column value 'Inactive' circled in orange. Below the table, the 'Location Address' section shows details for the selected location.

Select Loc Id	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Review Start	Review End	Status	LSE Reviewed	Reviewer Name	Reviewer Contact
<input checked="" type="checkbox"/>	541406	Example for training - rkm	123456	DABC	UABC	LABC	SLAP_ABCD	07/01/2016	08/30/2017	06/23/2016	06/24/2016	Inactive	Y	LSE Reviewer	916-351-4400

Address 1	Address 2	City	State	Zip	Type
250 Outcropping Way		Folsom	CA	95630	

- Once the location has successfully completed the LSE and UDC review, the status is set to Inactive
- The DRP can now add the location to a new (or existing) registration

Create new registration



California ISO Demand Response Registration System

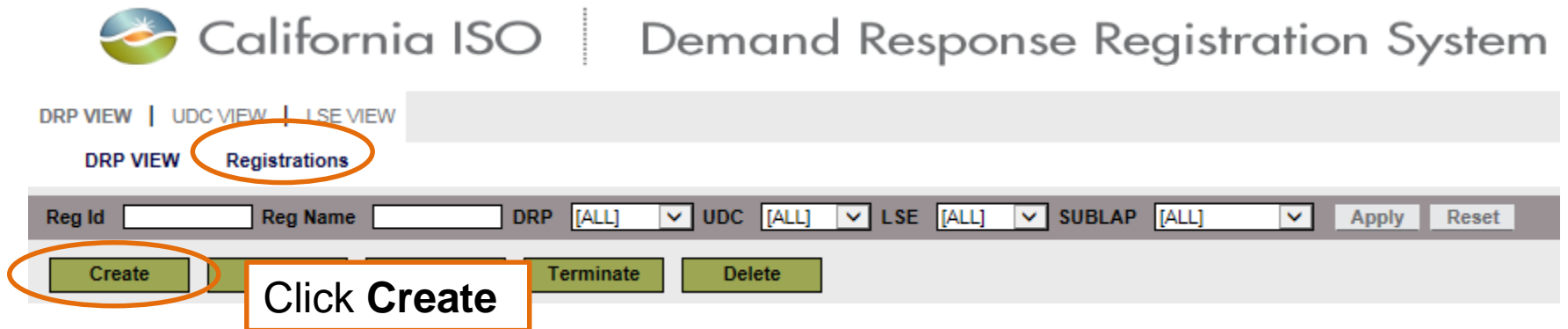
DRP VIEW | UDC VIEW | LSE VIEW

Locations Registrations

Registrations

Select Registrations from the **DRP VIEW** Tab

Apply Reset



California ISO Demand Response Registration System

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Registrations

Reg Id Reg Name DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL] Apply Reset

Create Terminate Delete

Click Create

Create new registration

California ISO Demand Response Registration System



DRRS

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Registration

Registration

Reg Id

Name*

Start Date*

End Date*

DRP*

UDC*

LSE*

SUBLAP*

DLAP*

DRP SCID*

Program*

Resource Type*

Resource

PMax

Baseline Method*

Status

Choices in these fields will filter results shown in Available Locations

Available Locations

ID	Name	SAN	Start Date	End Date	PNODE

Selected Locations

ID	NAME	SAN	Start Date	End Date	PNODE

Distribution Factor

PNODE	Distribution Factor

Cancel Save Submit

Create new registration

California ISO Demand Response Registration System



DRRS

DRP VIEW | UDC VIEW | LSE VIEW

DRP VIEW Registration

Registration

Reg Id

Name*

Start Date*

End Date*

DRP*

UDC*

LSE*

SUBLAP*

DLAP*

DRP SCID*

Program*

Resource Type*

Resource

PMax

Baseline Method*

Status

Available Locations will also be filtered based on Resource Type

Available Locations

ID	Name	SAN	Start Date	End Date	PNODE



Selected Locations

ID	NAME	SAN	Start Date	End Date	PNODE

Distribution Factor

PNODE	Distribution Factor

Create new registration

DLAP*

DRP SCID*

Program*

Resource Type*

Resource

PMax

Baseline Method*

Status

>

>>

<

<<

Selected Locations					
ID	NAME	SAN	Start Date	End Date	PNODE

Distribution Factor	
PNODE	Distribution Factor

- Custom

- only locations with PNODE information can be selected
- Distribution Factor must be included and must equal 1

Create new registration

DLAP*

DRP SCID*

Program*

Resource Type*

Resource

PMax

Baseline Method*

Status

>

>>

<

<<

ID	NAME	SAN	Start Date	End Date	PNODE

PNODE	Distribution Factor

- Pre-Defined
 - Resource field will display available resources that can be selected based on Registration information provided, including:
 - Resource IDs previously assigned to the DRP
 - Unassigned Pre Defined resource IDs for the identified SUBLAP

Create new registration

California ISO | Demand Response Registration System

RP VIEW | UDC VIEW | LSE VIEW | ADMINISTRATION

DRP VIEW | Registration

Registration

Reg Id

Name*

Start Date*

End Date*

DRP*

UDC*

LSE*

SUBLAP*

DLAP*

DRP SCID*

Program*

Resource Type*

Resource

PMax

Baseline Method*

Status

10 in 10 with SMA
Hourly Gen (requires CAISO pre-approval)
Meter Generation Output
Meter Generation Output with 10 in 10

- Select the Baseline Method that will be used to determine the performance of the resource
- Some options may require pre-approval by the ISO
- New options added to this list as part of Energy Storage and Distributed Energy Resources (ESDER) project

Create new registration

Registration

Reg Id

Name*

Start Date* 31

End Date* 31

DRP*

UDC*

LSE*

SUBLAP*

DLAP*

DRP SCID*

Program*

Resource Type*

Resource

PMax

Baseline Method*

Status

Available Locations

ID	Name	SAN	Start Date	End Date	PNODE

Selected

ID	NAME	SAN

>

>>

<

<<

Cancel Save Submit

Save

- Creates a new registration
- Assigns registration ID

Submit

- Creates a new registration
- Assigns registration ID
- Submits registration to DRS to proceed with resource management processing

Create new registration (from Locations tab)

LOC ID LOC Name SAN DRP [ALL] UDC [ALL] LSE [ALL] SUBLAP [ALL]

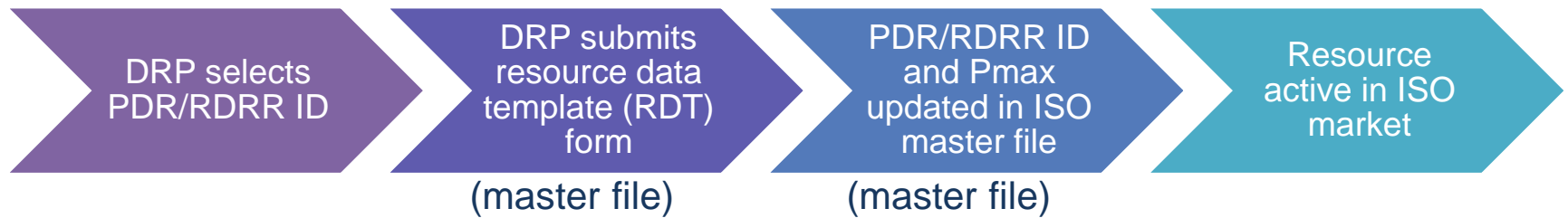
Locations

1 - 30 of 320

Select Loc ID	Name	SAN	DRP	UDC	LSE	SUBLAP	PNODE	Start Date	End Date	Status
<input checked="" type="checkbox"/>	543175000001 New Test Location A	01237596	DABC	UABC	LABC	SLAP_ABCD		02/01/2018	02/05/2018	Inactive
<input type="checkbox"/>	543170000004 New Test Location B	01237588	DABC	UABC	LABC	SLAP_ABCD		02/01/2018	02/05/2018	Pending
<input type="checkbox"/>	543170000003 New Test Location C	01237590	DABC	UABC	LABC	SLAP_ABCD		02/01/2018	02/25/2018	Pending
<input type="checkbox"/>	542963000001 New Test Location D	01237600	DABC	UABC	LABC	SLAP_ABCD		01/01/2018	01/31/2018	Active
<input checked="" type="checkbox"/>	542959000001 New Test Location E	01237808	DABC	UABC	LABC	SLAP_ABCD		08/15/2016	12/31/2020	Inactive
<input type="checkbox"/>	542922000004 New Test Location F	01237444	DABC	UABC	LABC	SLAP_ABCD		01/01/2018	01/05/2018	Active
<input type="checkbox"/>	542922000003 New Test Location G	012511087	DABC	UABC	LABC	SLAP_ABCD		01/01/2018	01/25/2018	Pending

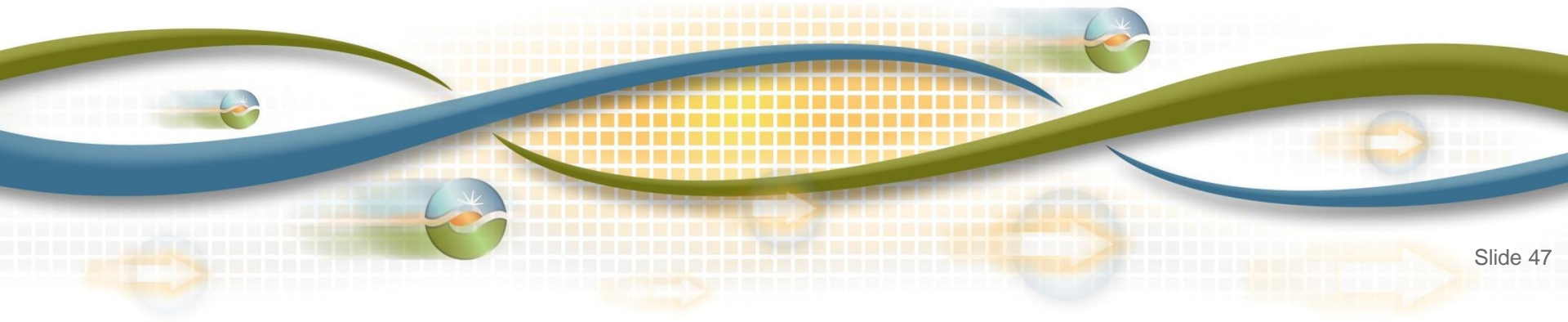
- A registration can also be created from the Location tab
- Use check box to select location(s) and click Register

Next steps for DRP



Notifications

Examples of e-mail notifications



System notifications

Each time the status of a location changes, an email notification is sent to the DRP, UDC, and LSE

Notifications are sent based on the role assigned to the DRRS user in AIM

Example: Location has been submitted

Subject: Location Submitted

The following location has been submitted for the review process.

Location Id: 541406
Location Name: Example for training - rkm
SAN: 123456
DRP: DABC
UDC: UABC
LSE: LABC
SUBLAP: SLAP_ABCD
START DATE: 2016-07-01 00:00:00.0
END DATE: 2017-06-30 00:00:00.0
STATUS: Pending

Example: Location has been reviewed by the UDC

Subject: Location reviewed by UDC

The following location has been reviewed by UDC

Location Id: 541406
Location Name: Example for training - rkm
SAN: 123456
DRP: DABC
UDC: UABC
LSE: LABC
SUBLAP: SLAP_ABCD
START DATE: 2016-07-01 00:00:00.0
END DATE: 2017-06-30 00:00:00.0
STATUS: Pending
REVIEWER NAME: UDC Reviewer
REVIEWER PHONE: 916-351-4400
COMMENT: IS APPROVED: true with comments: (Note: Comments are required if Valid Location field is not checked)

Example: Location has been reviewed by the LSE

Subject: Location reviewed by LSE

The following location has been reviewed by LSE

Location Id: 541406
Location Name: Example for training - rkm
SAN: 123456
DRP: DABC
UDC: UABC
LSE: LABC
SUBLAP: SLAP_ABCD
START DATE: 2016-07-01 00:00:00.0
END DATE: 2017-06-30 00:00:00.0
STATUS: Active
REVIEWER NAME: LSE Reviewer
REVIEWER PHONE: 916-351-4400
COMMENT: IS APPROVED: true with comments: (Note: Comments are required if Valid Location field is not checked)

Example: Registration has been submitted

Subject: Registration Submitted

The following registration has been submitted

Registration Id: 541407
Registration Name: RKM example for training
DRP: DABC
UDC: UABC
LSE: LABC
SUBLAP: SLAP_ABCD
START DATE: 2016-07-01 00:00:00.0
END DATE: 2017-06-30 00:00:00.0
STATUS: CONFIRMED

Changes to Demand Response System (DRS)

As-Is DRS Functionality

View aggregate locations

Create & modify registrations

Review and comment by LSE and UDC

ISO review and assignment of PDR/RDRR ID

Upload & download meter data

Calculate & download customer baseline information

Evaluate compliance and event information

To-Be DRS Functionality

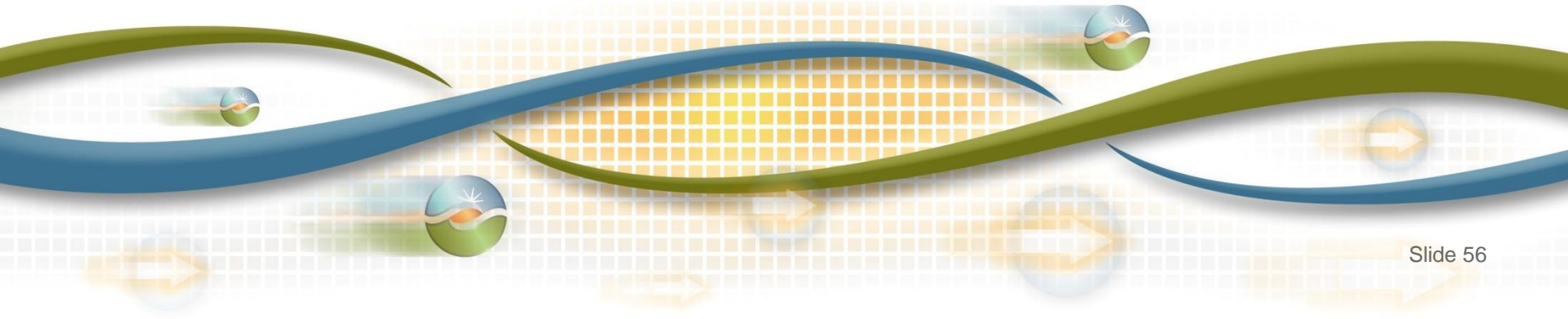
View registrations

Upload &
download meter
data

Calculate &
download
customer baseline
information

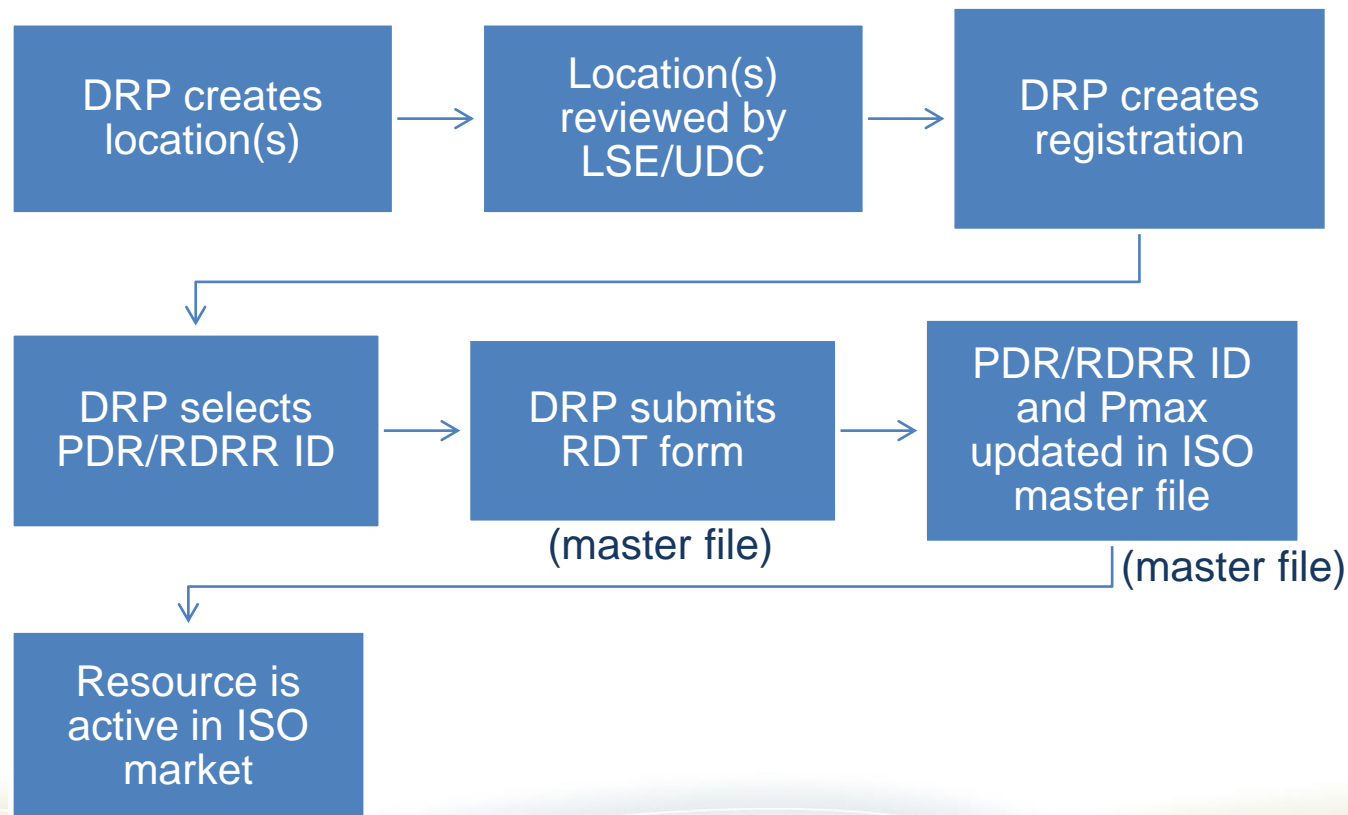
Evaluate
compliance and
event information

Registration Management



Review of new registration process

- Locations are created in the Demand Response Registration System (DRRS) via user interface or API
- Locations are reviewed and registered in the Demand Response Registration System (DRRS) via user interface or API



Questions?

- Support during market simulation:
 - Contact the ISO service desk at (888) 889-0450 or servicedesk@caiso.com
 - Submit a CIDI ticket (select the appropriate market sim environment)
- Support after production release:
 - Contact the ISO service desk at (888) 889-0450 or servicedesk@caiso.com
 - Submit a ticket in CIDI (select the Production environment)

Reference Material

Reference Material (documentation)

Acronyms

Reference Material

- Business Requirements Specification for Enabling Demand Response – Registration Enhancements:
 - http://www.caiso.com/Documents/BusinessRequirementsSpecificationv11_DemandResponseRegistrationEnhancementsClarifications.pdf
- Technical Specifications:
 - <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=C08260D8-0BA6-4346-8DAD-07C51ED36CF7>

Acronyms

Acronym	Description
AARF	Application Access Request Form
AIM	Access and Identity Management
API	Application Programming Interface
DRP	Demand Response Provider
DRRS	Demand Response Registration System
DRS	Demand Response System
LSE	Load Serving Entity
PDR	Proxy Demand Response Resource
RDRR	Reliability Demand Response Resource
RDT	Resource Data Template
SAN	Service Account Number
UAA	User Access Administrator
UDC	Utility Distribution Company