

MUI Allocation Overview

1. CRR MUI Training - Allocation_CBT_2014_03_27

1.1 Congestion Revenue Rights (CRR)



1.2 Introduction



1.3 Goal of this Training Course

Goal of this Training Course

Provide an overview of the various CRR processes that participants should understand in order to be able to participate in the CRR Allocation and/or CRR Auction. This course will specifically focus on the use of the Market User Interface as it relates to the allocation processes.



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1.4 Training Course Agenda

Training Course Agenda

In this presentation we will discuss the following topics related to Congestion Revenue Rights and the allocation process:

- Section 1 – Historical / Forecasted Load Processes
- Section 2 – Allocation eligibility data and examples
 - Please download examples from the training website at:
<http://www.caiso.com/participate/Pages/LearningCenter/CongestionRevenueRights.aspx>
- Section 3 – Allocation portfolio process




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1.5 Section 1 – Historical / Forecasted Load Processes

Section 1 – Historical / Forecasted Load Processes

General Load Data Processes

- Overview of gathering and using load data
- How to upload/view load data
- What happens to the data that is uploaded


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1.6 Overview of Load Data Process

Overview of Load Data Process

- For the allocation process the submittal of load data through the MUI is the starting point for being able to participate in the allocation.
- As was discussed in the MUI overview presentation the data will need to be submitted in XML format
- From the historical and/or forecasted load data the allocation participant's eligibility is determined.
- Annual allocation process will be based on historical data while the monthly allocation process will typically use forecasted load data, although LSEs with load levels driven by hydrological conditions can utilize average historical data for determining eligibility


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1.7 Historical/Forecasted Load Data: Annual

Historical/Forecasted Load Data: Annual


- CRR System will calculate 2 load duration curves (ON & OFF) for each sink and season
- ISO conducts audit against metered data
- Differences are sent back to the entities
- ISO calculates Seasonal Eligible Quantities (SEQ)
- Tier 1 and Tier LT SEQs are sent back to entity via Private Message
- Tier 2 and 3 SEQs are sent back via Private Download. Select the allocation option on the left side of the screen and click on the Market tab and select the market name

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1.8 Historical/Forecasted Load Data: Monthly

Historical/Forecasted Load Data: Monthly

- System will calculate 2 load duration curves (ON & OFF) for each sink
- ISO conducts audit against CEC Resource Adequacy Forecast
- Differences are sent back to the entities
- ISO calculates Monthly Eligible Quantities (MEQ)
- Tier 1 MEQ is sent back to entity via Private Message
- Tier 2 MEQ is sent back via Private Download. Select the allocation option on the left side of the screen and click on the Market tab and select the market name


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1.9 Historical/Forecasted Load Data: I - Upload XML File Fields

Historical/Forecasted Load Data: I - Upload XML File Fields

- Market Participants must create and upload the following load data elements in eXtensible Markup Language (.xml) format:
 - Asset Owner Name
 - Sink Name
 - Class ('Historical', 'Forecasted')
 - Date
 - Hour Ending (using hour ending format in Pacific Prevailing Time)
 - Data Type ('Final Load', 'Preliminary Load', 'Pump Load', 'Generation')
 - MW value


Note: "Preliminary Load" can be used by an MSS for load within the bubble, "Generation" can be used for generation within the bubble and "Pump Load" may also be used by those with pump load. The difference between Load and Generation is the "Final Load" value. Only "Final Load" values are considered by the software when calculating the load metric.

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1.10 Historical/Forecasted Load Data: II - Sample Data

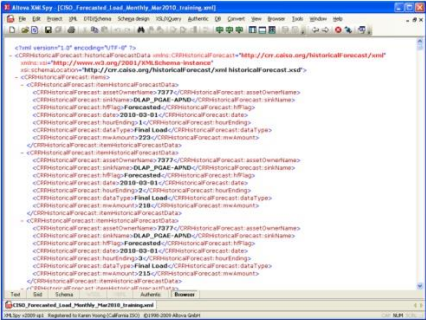
Historical/Forecasted Load Data: II - Sample Data

Asset Owner	Sink	H/F	Date	HE	Data Type	MW
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	1	Final Load	223
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	2	Final Load	218
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	3	Final Load	215
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	4	Final Load	218
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	5	Final Load	227
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	6	Final Load	256
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	23	Final Load	299
7377	DLAP_PGAE-APND	Forecasted	3/1/2010	24	Final Load	237
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	1	Final Load	254
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	2	Final Load	243
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	3	Final Load	237
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	4	Final Load	235
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	5	Final Load	243
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	6	Final Load	270
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	23	Final Load	300
7377	DLAP_PGAE-APND	Forecasted	3/2/2010	24	Final Load	272
7377	DLAP_PGAE-APND	Forecasted	3/3/2010	1	Final Load	258
7377	DLAP_PGAE-APND	Forecasted	3/3/2010	2	Final Load	246
7377	DLAP_PGAE-APND	Forecasted	3/3/2010	3	Final Load	240
7377	DLAP_PGAE-APND	Forecasted	3/3/2010	4	Final Load	239
7377	DLAP_PGAE-APND	Forecasted	3/3/2010	5	Final Load	246

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1.11 Historical/Forecasted Load Data: III - Sample XML File

Historical/Forecasted Load Data: III - Sample XML File



The screenshot displays an XML document with a root element `<root version="1.0" encoding="UTF-8">`. It contains two main sections: `<HistoricalForecastedLoadData>` and `<ForecastedLoadData>`. Each section includes an `assetName` (e.g., "DLAP_PG&A") and a `date` (e.g., "2010-09-01"). The data is organized into `hourly` and `daily` elements, with `FinalLoad` and `Forecast` sub-elements. The XML structure is repeated for multiple assets and dates.

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1.12 Historical/Forecasted Load Data: IV - XML File

Historical/Forecasted Load Data: IV - XML File Upload Notes

Notes:

- If some records already exist in the system (i.e., were uploaded earlier), the MW amount and the last modified date of the corresponding records will be updated by the new data
- During upload, CRR system applies some validation rules to make sure that the data is consistent
 - If one record fails validation, the entire upload is rejected
 - Rejected uploads produce errors messages

Validation rules are as follows:

- Date/Hour must exist in the Time of Use definition table
- MW amount should be greater than or equal to zero
- Sink name has to exist in the database and be valid for the upload dates
- Current date will fall within the submission open and close date for the current record

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1.13 Historical/Forecasted Load Data

Historical/Forecasted Load Data

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Display a Forecast Focus

Public CRR Private CRR
Downloads

Historical/Forecast Messages
Auction Portfolio
Allocation Portfolio

Show 15 records per page

HF Term	Exceedance	Historical/Forecasted Load	Start Effective Date	End Effective Date	Start Submission Date	End Submission Date	Last Modified Date	Upload	New Load
H Seasonal	0.5	New	03/01/2011	03/31/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
H Seasonal	0.5	New	07/01/2011	09/30/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
H Seasonal	0.5	New	04/01/2011	06/30/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
H Seasonal	0.5	New	10/01/2011	12/31/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
F Monthly	0.5	Open	05/01/2012	05/31/2012	03/19/2012	03/30/2012	03/22/2012	Upload	New Load
F Monthly	0.5	Closed	03/01/2012	03/31/2012	01/27/2012	01/27/2012	01/27/2012	Upload	New Load
F Monthly	0.5	Closed	12/01/2011	12/31/2011	12/09/2011	12/09/2011	12/09/2011	Upload	New Load
F Monthly	0.5	Closed	10/01/2011	10/31/2011	10/20/2011	10/19/2011	10/19/2011	Upload	New Load
F Monthly	0.5	Closed	08/01/2011	08/31/2011	08/12/2011	08/30/2011	08/30/2011	Upload	New Load
H Monthly	0.5	Closed	11/01/2009	11/30/2009	09/08/2011	09/08/2011	08/30/2011	Upload	New Load
H Monthly	0.5	Closed	11/01/2007	11/30/2007	09/08/2011	09/08/2011	08/30/2011	Upload	New Load
H Monthly	0.5	Closed	11/01/2010	11/30/2010	09/08/2011	09/08/2011	08/30/2011	Upload	New Load

156 Items Found, displaying 1 to 15.
First Previous & 2 3 4 5 Next Last

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Annotations:
 - Click on Historical/Forecasted Load
 - Future windows also show up on this page.
 - Click here to select how many load windows to display on the page.
 - Upload button is enabled if a window is open

1.14 Historical/Forecasted Load Data

Historical/Forecasted Load Data

California ISO
Display a Forecast Focus

CRR SYSTEM
Welcome CISO (Full Access) (WR: NCA) Return to Entry & Role Selection

Public CRR Private CRR

Historical/Forecasted Load Data

Show 15 records per page

HF Term	Exceedance	States	Start Effective Date	End Effective Date	Start Submission Date	End Submission Date	Last Modified Date	Upload	New Load
H Seasonal	0.5	New	01/01/2011	03/31/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
H Seasonal	0.5	New	07/01/2011	09/30/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
H Seasonal	0.5	New	04/01/2011	06/30/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
H Seasonal	0.5	New	10/01/2011	12/31/2011	04/02/2012	04/06/2012	03/26/2012	Upload	New Load
F Monthly	0.5	Open	05/01/2012	05/31/2012	03/19/2012	03/30/2012	03/22/2012	Upload	New Load
F Monthly	0.5	Closed	03/01/2012	03/31/2012	01/27/2012	01/27/2012	01/27/2012	Upload	New Load
F Monthly	0.5	Closed	12/01/2011	12/31/2011	12/09/2011	12/09/2011	12/09/2011	Upload	New Load
F Monthly	0.5	Closed	10/01/2011	10/31/2011	10/20/2011	10/19/2011	10/19/2011	Upload	New Load
F Monthly	0.5	Closed	08/01/2011	08/31/2011	08/12/2011	08/30/2011	08/30/2011	Upload	New Load
H Monthly	0.5	Closed	11/01/2010	11/30/2010	09/08/2011	09/08/2011	08/30/2011	Upload	New Load
H Monthly	0.5	Closed	11/01/2007	11/30/2007	09/08/2011	09/08/2011	08/30/2011	Upload	New Load
H Monthly	0.5	Closed	11/01/2010	11/30/2010	09/08/2011	09/08/2011	08/30/2011	Upload	New Load

156 Items Found, displaying 1 to 15.
First Previous & 2 3 4 5 Next Last

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Annotations:
 - 1. Select window for which to upload load data to.
 - 2. Click on Upload data to upload H/F data

1.15 Historical/Forecasted Load Data

Historical/Forecasted Load Data

CASO: Upload H/F Load Data - Windows Inte...

Upload Historical/Forecasted Load Data

Select file to upload
 Monthly_May2012_24hr | Browse...

Submit Cancel

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1.16 Historical/Forecasted Load Data

Historical/Forecasted Load Data

CRR SYSTEM
Welcome CASO Full Access (CRR-NDAL) Return to Entity & Role Selection

Public CRR Private CRR

Historical/Forecasted Load Data

Completed processing 2157 record(s) of load data for Forecasted and Monthly load calculation between effective period 05/01/2012 and 05/31/2012. 2157 record(s) were successfully uploaded.

Show 15 records per page Search

H/F	Term	Exceedance	Status	Effective Date	End Effective Date	Start Submission Date	End Submission Date	Last Modified Date		
H	Seasonal	0.5	New	03/31/2011	04/02/2012	04/02/2012	04/06/2012	03/26/2012	Upload	View Load
H	Seasonal	0.5	Closed	04/02/2012	04/06/2012	04/06/2012	03/26/2012	03/26/2012	Upload	View Load
H	Seasonal	0.5	Closed	04/02/2012	04/06/2012	04/06/2012	03/24/2012	03/24/2012	Upload	View Load
F	Monthly	0.5	Open	05/01/2011	05/31/2011	03/19/2012	03/30/2012	03/22/2012	Upload	View Load
F	Monthly	0.5	Closed	03/01/2012	03/31/2012	01/27/2012	01/27/2012	01/27/2012	Upload	View Load
F	Monthly	0.5	Closed	01/01/2012	01/31/2012	12/09/2011	12/09/2011		Upload	View Load
F	Monthly	0.5	Closed	12/01/2011	12/31/2011	10/19/2011	10/20/2011		Upload	View Load
F	Monthly	0.5	Closed	11/01/2011	11/30/2011	09/09/2011	09/12/2011		Upload	View Load
H	Monthly	0.5	Closed	11/01/2009	11/30/2009	09/08/2011	09/08/2011		Upload	View Load
H	Monthly	0.5	Closed	11/01/2008	11/30/2008	09/08/2011	09/08/2011		Upload	View Load
H	Monthly	0.5	Closed	11/01/2005	11/30/2005	09/08/2011	09/08/2011		Upload	View Load
H	Monthly	0.5	Closed	11/01/2007	11/30/2007	09/08/2011	09/08/2011	08/30/2011	Upload	View Load
H	Monthly	0.5	Closed	11/01/2010	11/30/2010	09/08/2011	09/08/2011	08/30/2011	Upload	View Load

156 items found, displaying 1 to 15.
 First Previous < 2 3 4 5 Next Last Refresh

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1.17 Historical/Forecasted Load Data

Historical/Forecasted Load Data

California ISO CRR SYSTEM

Public CRR Private CRR

Historical/Forecasted Load Data > View Data

Filter data by Sink or Data Type or Time of Use

ID	Asset Owner Name	Sink Name	Date	Hour	Time Of Use	Data Type	MW Amount
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	1	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	2	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	3	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	4	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	5	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	6	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	23	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-01	24	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-02	1	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-02	2	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-02	3	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-02	23	OFF	Final Load	95.337
Forecasted	7377	DLAP_PGAE-APHD	2012-05-02	24	OFF	Final Load	95.337

Download data in csv format

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1.18 Section 1 – Questions

Section 1 – Questions

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General Load Data Processes

- Overview of gathering and using load data
- How to upload/view load data
- What happens to the data that is uploaded


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1.19 Section 2 – Allocation Eligibility Data

Section 2 – Allocation Eligibility Data

Allocation Eligibility Data and Examples


- Annual tiered structure with SEQ examples
 - Priority Nomination Process (PNP) / Tier 1
 - Tier Long Term
 - Tier 2
 - Tier 3
- Monthly tiered structure with MEQ examples
 - Tier 1
 - Tier 2

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1.20 CRR Allocation – Annual Eligibility Data

CRR Allocation – Annual Eligibility Data


- Let's walk through some examples of what the eligibility data would look like for the PNP. The examples are provided in separate Excel spreadsheets that are posted at the same location where the CBT session was started from. There are three types of data to look at for the PNP
 - Tier 1 SEQ
 - Sink Upper Bound
 - Source and Sink Signature Pairs

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1.21 CRR Allocation – Annual Eligibility Data (cont.)

CRR Allocation – Annual Eligibility Data (cont.)


- The next tier in the annual process after the PNP is tier long-term (LT)
- Let's walk through an example of the eligibility data for Tier LT
 - Tier LT SEQ
 - Source and Sink Signature

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1.22 CRR Allocation – Annual Eligibility Data (cont.)

CRR Allocation – Annual Eligibility Data (cont.)


- After tier LT we then go back to the short term annual allocation process and open up tier 2
- Let's walk through an example of the eligibility data for Tier 2
 - Tier 2 SEQ

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1.23 CRR Allocation – Annual Eligibility Data (cont.)

CRR Allocation – Annual Eligibility Data (cont.)


- The last tier for the short term annual allocation process is tier 3
- Let's walk through an example of the eligibility data for Tier 3
 - Tier 3 SEQ

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1.24 CRR Allocation – Monthly Eligibility Data

CRR Allocation – Monthly Eligibility Data

- Let's walk through an example of what the eligibility data for the monthly allocation process would look like by looking at the tier 1 MEQ data
 - Tier 1 MEQ

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1.25 CRR Allocation – Monthly Eligibility Data (cont.)

CRR Allocation – Monthly Eligibility Data (cont.)

- Let's walk through an example of what the monthly eligibility data would look like for tier 2
 - Tier 2 MEQ



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1.26 Section 2 – Questions

Section 2 – Questions

Allocation Process

- Annual tiered structure with SEQ examples
 - Priority Nomination Process (PNP) / Tier 1
 - Tier Long Term
 - Tier 2
 - Tier 3
- Monthly tiered structure with MEQ examples
 - Tier 1
 - Tier 2




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1.27 Section 3 – Allocation Portfolios

Section 3 – Allocation Portfolios

Allocation Portfolio Process


- Creating / Viewing Portfolios
- Editing Portfolios
- Submitting Portfolios

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1.28 Creating / Viewing Allocation Portfolios

Creating / Viewing Allocation Portfolios

- Various Methods for creating allocation portfolios
 - Allocation Portfolio – How to create nominations (Manual creation)
 - Allocation Portfolio – How to create nominations (Existing Portfolio)
 - Allocation Portfolio – How to create nominations (download existing portfolio)
 - Allocation Portfolio – How to create nominations (Upload)
- Allocation Portfolio – Submit to Allocation

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1.29 Allocation Portfolio Creation – Drag and Drop

Allocation Portfolio Creation – Manual Creation

- In the next few slides we will go over the manual creation methodology for creating an allocation portfolio
- This method is typically used if the LSE only has a few nominations to add.
- This method is the simplest but can take a fair amount of time if there are a large number of nominations

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1.30 Allocation Portfolio – Drag & Drop

Allocation Portfolio – Manual Creation

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CRR SYSTEM

1) Select "Allocation Portfolio" from Private CRR drop-down menu

Portfolio Name	Historical/Forecasted Load	Download	Allocation study Name	Submit to Allocation	Remove from Allocation	Delete
Test	2012-03-28T16:41:02-0700	XML				

2) Then press "Add New"

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1.31 Allocation Portfolio – Drag & Drop

Allocation Portfolio – Manual Creation

3) Portfolio name

4) Description (optional)

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1.32 Allocation Portfolio – Drag & Drop

Allocation Portfolio – Manual Creation

5) Select market name or template

6) Add

Note: To ensure that you are selecting the most current APINodes, we recommend that you select the market name first.

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1.33 Allocation Portfolio – Drag & Drop

Allocation Portfolio – Manual Creation

The screenshot shows the 'Allocation Portfolio – Manual Creation' interface. It includes fields for Portfolio Name, Description (Optional), and Market Identifier. Below these are date fields for Start Date, End Date, Open Date, and Close Date. A table with columns for Bid Price, Bid, Sink, MW, TOU, Hedge Type, and Type is visible. A callout 'Market open and close date' points to the Open and Close date fields. Another callout 'Market effective start and end date' points to the Start and End date fields. A third callout '7) Expand list of Asset Owners' points to a dropdown menu on the right side of the interface.

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1.34 Allocation Portfolio – Drag & Drop

Allocation Portfolio – Manual Creation

The screenshot shows the 'Allocation Portfolio – Manual Creation' interface with several callouts:

- '10) Input MW amount' points to the MW column in the table.
- '11) Select TOU (ON or OFF)' points to the TOU column.
- '12) Select Hedge Type (OBL only at this time)' points to the Hedge Type column.
- '8) Select Asset Owner and click "Set AO"' points to the Asset Owner dropdown.
- '9) Select Source and Sink and click "Set Source" or "Set Sink"' points to the Source and Sink dropdowns.
- '13) Select Type (LSE, OBAALSE)' points to the Type dropdown.

Note: Allocation portfolios do not have bid curves, only nominated MW amounts.

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1.35 Allocation Portfolio – Drag & Drop

Allocation Portfolio – Manual Creation

14) Add to insert more lines and repeat process from previous slide

15) Save

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1.36 Allocation Portfolio Creation – Existing Portfolio

Allocation Portfolio Creation – Existing Portfolio

- In the next few slides we will go over how to create an allocation portfolio using an existing portfolio
- This method is typically used if the LSE uses similar nominations each month and just needs to changes MW amounts or add and delete a few lines.
- This method is useful when the LSE has little variation in the portfolios that are used and only slight modifications are needed
- There are two ways to use an existing portfolio; copying from the historical portfolio tab or downloading an existing portfolio in XML

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1.37 Allocation Portfolio – Existing Portfolio

Allocation Portfolio – Existing Portfolio

Private CRR > Allocation Portfolio List

Show 15 records per page

Portfolio Name	Date Submitted	Download	Allocation Name	Make a copy as Template
Mar_ETC_2012_25%	2012-03-30T14:35:53-0700	XML	AL	Copy
February_T1_TransBay_2012	2012-01-26T15:41:31-0800	XML	AL	Copy
December_T1_TransBay_2011	2011-12-08T10:42:34-0800	XML	AL	Copy
CISO_ALLOC_MN_M01_ETC	2011-12-08T13:55:41-0800	XML	AL	Copy
CISO_ALLOC_IT_2011	2011-12-08T13:55:41-0800	XML	AL	Copy
CISO_ALLOC_TOR_TER_MT	2011-12-08T13:55:41-0800	XML	AL	Copy
CISO_ALLOC_TOR_TER_MT1	2011-12-08T13:55:41-0800	XML	AL	Copy
November_T1_TransBay_2011	2011-11-11T11:33:58-0700	XML	AL	Copy
September_T1_TransBay_2011	2011-09-10T10:48:51-0700	XML	AL	Copy
September_ETC_2011_25%	2011-09-10T10:48:51-0700	XML	AL	Copy
August_T2_TransBay_2011	2011-07-15T08:35:56-0700	XML	AL	Copy
August_T1_TransBay_2011	2011-07-11T11:33:58-0700	XML	AL	Copy
August_ETC_2011_25%	2011-07-08T17:15:06-0700	XML	AL	Copy
Jul_T2_TransBay_2011	2011-06-16T11:00:11-0700	XML	AL	Copy
Jul_T1_TransBay_2011	2011-06-10T08:22:55-0700	XML	AL	Copy

138 items found, displaying 1 to 15.
[First/Prev] & 2 3 4 [Next/Last]

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Annotations:
1) Click on the Historical tab
2) Locate the Portfolio that you want to copy
3) Click on Copy

1.38 Allocation Portfolio – Existing Portfolio

Allocation Portfolio – Existing Portfolio

Private CRR > Allocation Portfolio List

Show 15 records per page

Portfolio Name	Date Submitted	Download	Allocation Name	Make a copy as Template
Mar_ETC_2012_25%	2012-03-30T14:35:53-0700	XML	AL	Copy
February_T1_TransBay_2012	2012-01-26T15:41:31-0800	XML	AL	Copy
December_T1_TransBay_2011	2011-12-08T10:42:34-0800	XML	AL	Copy
CISO_ALLOC_MN_M01_ETC	2011-12-08T13:55:41-0800	XML	AL	Copy
CISO_ALLOC_IT_2011	2011-12-08T13:55:41-0800	XML	AL	Copy
CISO_ALLOC_TOR_TER_MT	2011-12-08T13:55:41-0800	XML	AL	Copy
CISO_ALLOC_TOR_TER_MT1	2011-12-08T13:55:41-0800	XML	AL	Copy
November_T1_TransBay_2011	2011-11-11T11:33:58-0700	XML	AL	Copy
September_T1_TransBay_2011	2011-09-10T10:48:51-0700	XML	AL	Copy
September_ETC_2011_25%	2011-09-10T10:48:51-0700	XML	AL	Copy
August_T2_TransBay_2011	2011-07-15T08:35:56-0700	XML	AL	Copy
August_T1_TransBay_2011	2011-07-11T11:33:58-0700	XML	AL	Copy
August_ETC_2011_25%	2011-07-08T17:15:06-0700	XML	AL	Copy
Jul_T2_TransBay_2011	2011-06-16T11:00:11-0700	XML	AL	Copy
Jul_T1_TransBay_2011	2011-06-10T08:22:55-0700	XML	AL	Copy

138 items found, displaying 1 to 15.
[First/Prev] & 2 3 4 [Next/Last]

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Annotation:
4) Provide name for portfolio

1.39 Allocation Portfolio – Existing Portfolio

Allocation Portfolio – Existing Portfolio

Private CRM > Allocation Portfolio List

6) Click on Portfolio to Edit

Portfolio	Sub Market	Default	Allocation/Market Name	Current Allocation	Market Name Allocation	Value
NA_2015_12_31	2015-01-01-2015-12-31	NA				0.0
NA_2015_12_31	2015-01-01-2015-12-31	NA				0.0
NA_2015_12_31	2015-01-01-2015-12-31	NA				0.0
NA_2015_12_31	2015-01-01-2015-12-31	NA				0.0

5) Portfolio now available on the Allocation Portfolio List Page as a Template

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1.40 Allocation Portfolio – Existing Portfolio

Allocation Portfolio – Existing Portfolio

Portfolio Name: [Text Field] Download Statement: [Text Field]

Select Existing Portfolio: [Text Field] Select Allocation: [Text Field]

Start Date: NA End Date: NA Open Date: NA Close Date: NA

ID	Portfolio Name	Start	End	Order	Order Type	Type	Value
1	NA_2015_12_31	2015-01-01	2015-12-31	1	NA	NA	0.0
2	NA_2015_12_31	2015-01-01	2015-12-31	2	NA	NA	0.0
3	NA_2015_12_31	2015-01-01	2015-12-31	3	NA	NA	0.0

8) Save

7) Select Template or Market Name

Modify data as necessary

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1.41 Allocation Portfolio – How to create nominations (download existing portfolio)

Allocation Portfolio – How to create nominations (download existing portfolio)

The screenshot shows a table titled "Private O&G > Allocation Portfolio List". The table has columns for "Portfolio Name", "Date Added", "Template", "Allocation entry type", "Status", "Approval", "Approval Date", and "Date". The first row is highlighted, and a callout points to the "Template" column with the instruction "1) Click on the template". Another callout points to the "XML" link in the first row with the instruction "2) Click on XML link to download file".

1) Click on the template

2) Click on XML link to download file

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1.42 Allocation Portfolio – How to create nominations (download existing portfolio)

Allocation Portfolio – How to create nominations (download existing portfolio)

The screenshot shows two windows. On the left is a "File Download" dialog box with the text "Do you want to open or save this file?" and fields for "Name: Text.xml", "Type: Application", and "From: portalmktm.caiso.com". A callout points to the "Save" button with the instruction "3) Save". On the right is a file explorer window showing the "Downloads" folder. A callout points to the "Downloads" folder with the instruction "4) Select file location". Below the file explorer, a callout points to the "Save" button with the instruction "5) Provide File Name and click Save".

3) Save

4) Select file location

5) Provide File Name and click Save

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1.43 Allocation Portfolio – How to create nominations (download existing portfolio)

Allocation Portfolio – How to create nominations (download existing portfolio)

```
<?xml version="1.0" encoding="UTF-8"?>
<CRDownLoad:nominations xmlns:CRDownLoad="http://crr.caiso.org/download/xml" >
  <CRDownLoad:title>
  <CRDownLoad:portfolioName>test</CRDownLoad:portfolioName>
  <CRDownLoad:portfolioDescription>test</CRDownLoad:portfolioDescription>
  <CRDownLoad:title>
  <CRDownLoad:nomination CRDownLoad:category="PTP">
    <CRDownLoad:nominationId>8247824</CRDownLoad:nominationId>
    <CRDownLoad:aoName>377</CRDownLoad:aoName>
    <CRDownLoad:sourceName>DEVERS_S_B1</CRDownLoad:sourceName>
    <CRDownLoad:sinkName>
    <CRDownLoad:mm>0.050</CRDownLoad:mm>
    <CRDownLoad:hedgeType>OBL</CRDownLoad:hedgeType>
    <CRDownLoad:Tou>ON</CRDownLoad:Tou>
    <CRDownLoad:ClassType>Buy</CRDownLoad:ClassType>
    <CRDownLoad:crrType>LSE</CRDownLoad:crrType>
  </CRDownLoad:nomination>
  <CRDownLoad:nomination CRDownLoad:category="PTP">
    <CRDownLoad:nominationId>8247825</CRDownLoad:nominationId>
    <CRDownLoad:aoName>377</CRDownLoad:aoName>
    <CRDownLoad:sourceName>ADLN_1_UNITS</CRDownLoad:sourceName>
    <CRDownLoad:sinkName>DLAP_SCE-APND</CRDownLoad:sinkName>
    <CRDownLoad:mm>0.500</CRDownLoad:mm>
    <CRDownLoad:hedgeType>OBL</CRDownLoad:hedgeType>
    <CRDownLoad:Tou>OFF</CRDownLoad:Tou>
    <CRDownLoad:ClassType>Buy</CRDownLoad:ClassType>
    <CRDownLoad:crrType>LSE</CRDownLoad:crrType>
  </CRDownLoad:nomination>
</CRDownLoad:nominations>
```

Open and modify template as necessary in Notepad or a similar program

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1.44 Allocation Portfolio Creation – Upload

Allocation Portfolio Creation – Upload


- In the next few slides we will go over the upload methodology for creating an allocation portfolio
- This method is typically used if the LSE has a large number of nominations to add and the portfolios vary month-to-month.
- This method is the most involved since it requires a tool or process to create an XML file but once it is developed this method is the most efficient for generating a large number of nominations and/or portfolios.

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1.45 Allocation Portfolio – How to create nominations (upload)

Allocation Portfolio – How to create nominations (upload)



California ISO CRR SYSTEM

Private CRR > Allocation Portfolio List


Portfolio Name	Sub-Portfolio	Start Date	Allocation Sub-Portfolio	Market Allocation	Market Share Allocation	Subs
CAISO_MU-UPLOADED_NOMINATION		2018-01-01 00:00:00				1
CAISO_MU-UPLOADED_NOMINATION		2018-01-01 00:00:00				1
CAISO_MU-UPLOADED_NOMINATION		2018-01-01 00:00:00				1
CAISO_MU-UPLOADED_NOMINATION		2018-01-01 00:00:00				1

1) Click on Upload

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1.46 Allocation Portfolio – How to create nominations (upload)

Allocation Portfolio – How to create nominations (upload)



CAISO_MU-UPLOAD_NOMINATION - Windows

Upload Allocation Portfolio

Select file to upload

Browse...

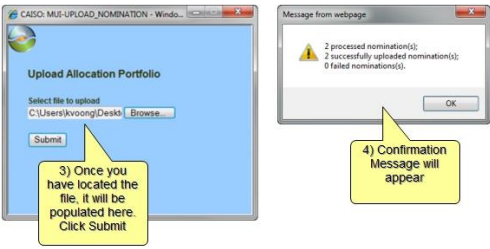
Submit

2) Click on Browse

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1.47 Allocation Portfolio – How to create nominations (upload)

Allocation Portfolio – How to create nominations (upload)



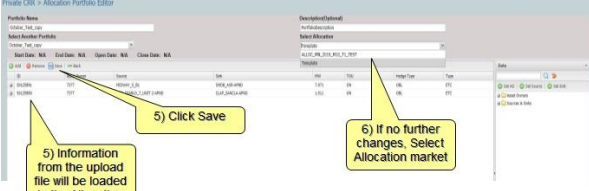
The screenshot shows two windows. The left window, titled 'Upload Allocation Portfolio', has a 'Select file to upload' field with a 'Browse...' button and a 'Submit' button. A yellow callout box points to the 'Submit' button with the text: '3) Once you have located the file, it will be populated here. Click Submit'. The right window, titled 'Message from webpage', displays a yellow warning icon and the text: '2 processed nomination(s); 2 successfully uploaded nomination(s); 0 failed nomination(s)'. A yellow callout box points to the 'OK' button with the text: '4) Confirmation Message will appear'.

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1.48 Allocation Portfolio – How to create nominations (upload)

Allocation Portfolio – How to create nominations (upload)



The screenshot shows the 'Allocation Portfolio Editor' window. It features a 'Portfolio Name' field, a 'Market Allocation' table, and a 'Save' button. A yellow callout box points to the 'Save' button with the text: '5) Click Save'. Another yellow callout box points to the 'Market Allocation' table with the text: '6) If no further changes, Select Allocation market'. The table contains the following data:

Symbol	Quantity	Market	Allocation
100	100	100	100
100	100	100	100
100	100	100	100

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1.49 Allocation Portfolio – Submit to Allocation

Allocation Portfolio – Submit to Allocation

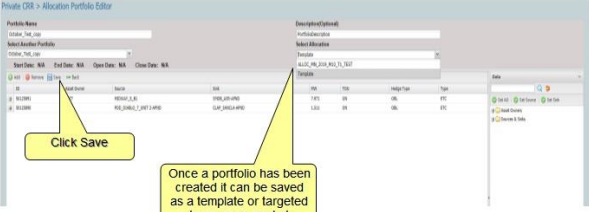
- In the next few slides we will go over the process for ensuring that once a portfolio has been created to have it targeted and submitted to a particular allocation market.
- There are two separate steps to complete after creating a portfolio in order to have it submitted to an allocation market. The first step is to target the portfolio to a specific market and the final step is to submit the portfolio.

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1.50 Allocation Portfolio – Submit to Allocation

Allocation Portfolio – Submit to Allocation



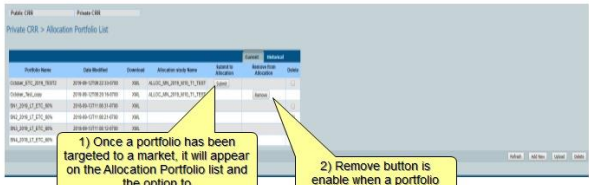
The screenshot shows the 'Allocation Portfolio Editor' interface. It includes a 'Portfolio Name' field, a 'Description' field, and a 'Market' dropdown menu. A table of 'Assets' is visible, with columns for 'Asset Name', 'Market', 'Type', 'Weight', 'Unit', 'Hedge Type', and 'Type'. A yellow callout box points to the 'Save' button with the text 'Click Save'. Another yellow callout box points to the 'Market' dropdown with the text 'Once a portfolio has been created it can be saved as a template or targeted to an open market'.

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1.51 Allocation Portfolio – Submit to Allocation

Allocation Portfolio – Submit to Allocation



The screenshot shows a table titled "Private CSE > Allocation Portfolio List". The table has columns for Portfolio Name, Date Submitted, Overall, Allocation Status, Market ID, Allocation Date, and Action. The first row shows a portfolio named "2016-08-22-15:00" with a "Submit" button in the Action column. A yellow callout box points to this button with the text: "1) Once a portfolio has been targeted to a market, it will appear on the Allocation Portfolio list and the option to 'Submit' will appear under Submit to Allocation". Another yellow callout box points to the "Remove" button in the Action column of the second row with the text: "2) Remove button is enable when a portfolio has been successfully submitted to a market".

1) Once a portfolio has been targeted to a market, it will appear on the Allocation Portfolio list and the option to "Submit" will appear under Submit to Allocation

2) Remove button is enable when a portfolio has been successfully submitted to a market

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1.52 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

- In the next few slides we will go over the process for removing a submitted portfolio from an allocation market.
- If the portfolio is not properly removed from the market then any results become binding.
- It is also important to understand that edits cannot be made to a portfolio that has been submitted to a market. The portfolio must be un-submitted before any edits can be made.

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1.53 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

1) Click Remove

Portfolio Name	Sub-Portfolio	Contract	Allocation with Name	Contract Status	Remove from Allocation
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove

portalintstage.wepex.net says
Are you sure you want to remove the Portfolio from being submitted to Allocation?

2) Confirm Action

OK Cancel

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1.54 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

3) Processing

Portfolio Name	Sub-Portfolio	Contract	Allocation with Name	Contract Status	Remove from Allocation
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove
Contract: PFLX_2015_2015	2015-01-01-2015-01-01	XXX	ALLIUM, ALLIUM, ALLIUM, ALLIUM, ALLIUM	Contract	Remove

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1.55 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

The screenshot shows a web application interface for 'Private CSR - Allocation Portfolio List'. It features a table with columns: Portfolio Name, Sub Method, Contract, Allocation Date Range, Status, Remove from Allocation, and Delete. The table contains five rows of data. A yellow callout box with a pointer to the 'Submit' button at the bottom right of the table contains the text: '4) Submit button is enabled'. The California ISO logo is visible in the bottom left corner.

Portfolio Name	Sub Method	Contract	Allocation Date Range	Status	Remove from Allocation	Delete
ALLOCATION_PORTFOLIO_1	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_2	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_3	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_4	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_5	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X

4) Submit button is enabled

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1.56 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

The screenshot shows the same web application interface as in slide 1.55. A red circle highlights the 'Portfolio Name' column of the first row. A yellow callout box with a pointer to this row contains the text: '5) Click on Portfolio Name'. The California ISO logo is visible in the bottom left corner.

Portfolio Name	Sub Method	Contract	Allocation Date Range	Status	Remove from Allocation	Delete
ALLOCATION_PORTFOLIO_1	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_2	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_3	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_4	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X
ALLOCATION_PORTFOLIO_5	2018-01-01-2018-01-01	001	2018-01-01-2018-01-01	Open		X

5) Click on Portfolio Name

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1.57 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

7) Save

6) Select Template to save as template

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1.58 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation

Portfolio Name	Start Date	End Date	Allocation Policy Name	Asset Allocation	Template	Template	Template
ALLO_2018_1001	2018-10-01-00:00:00	2018-10-01-00:00:00	ALLO_2018_1001	100%			
ALLO_2018_1002	2018-10-01-00:00:00	2018-10-01-00:00:00	ALLO_2018_1002	100%			
ALLO_2018_1003	2018-10-01-00:00:00	2018-10-01-00:00:00	ALLO_2018_1003	100%			
ALLO_2018_1004	2018-10-01-00:00:00	2018-10-01-00:00:00	ALLO_2018_1004	100%			
ALLO_2018_1005	2018-10-01-00:00:00	2018-10-01-00:00:00	ALLO_2018_1005	100%			


8) Portfolio is now a template

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1.59 Allocation Portfolio – Remove from Allocation

Allocation Portfolio – Remove from Allocation



The screenshot shows a web application interface for managing allocation portfolios. A table lists several portfolios with columns for Portfolio Name, Date Modified, Deleted, Allocation with Name, Admins, Admins, Current, and Deleted. A yellow callout box with a pointer highlights the 'Delete' button in the 'Deleted' column of the first row.

Portfolio Name	Date Modified	Deleted	Allocation with Name	Admins	Admins	Current	Deleted
100000_001_001_001	2010-01-15 10:00:00	Yes					Delete
100000_001_001_002	2010-01-15 10:00:00	Yes	100000_001_001_001	Admin			Delete
100000_001_001_003	2010-01-15 10:00:00	Yes					Delete
100000_001_001_004	2010-01-15 10:00:00	Yes					Delete
100000_001_001_005	2010-01-15 10:00:00	Yes					Delete

9) Click Delete to Remove from Allocation Portfolio List

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1.60 Section 3 – Questions

Section 3 – Questions

Allocation Portfolio Process

- Creating / Viewing Portfolios
- Editing Portfolios
- Submitting Portfolios

End of CRR MUI Allocation training section

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1.61 End - Thank You

