

Demand Response Information System (DRIS) Training for June 2010 Deployment Part 5 – Aggregations

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> May 11, 2010 1:00 pm – 4:00 pm May 17, 2010 1:00 pm – 4:00 pm (Webex only) June 8, 2010 9:00 am – 12:00 pm

> > **Rensselaer**, NY



Training Topics

- Part 1: Introduction to DRIS
 - DRIS User Requirements
 - Accessing DRIS
 - DRIS User Interface features
 - Terminology
 - Dashboard
 - DRIS Calendar
 - SCR and EDRP Activity Timelines
- Part 2: Imports and Exports
- Part 3: Resource Import File
 - Import Exceptions
- Part 4: Post-Import Operations
 - View Pending Records

- Part 5: Aggregations
 - Requesting Aggregation IDs
 - Aggregation Management
 - Strike Price
- Part 6: Other DRIS Operations
 - UCAP Report
 - Viewing Resource Information
- Part 7: Training, Market Trials and Deployment
 - Additional DRIS Training sessions for June Deployment
 - Market Trials
 - Deployment



Requesting a New Aggregation ID

•	From the SCR Menu, select		NEW YORK INDEPENDENT SYSTEM OPERATOR nergy Markets Of TomorrowToday	Demano Dashboa		e Information	System
	"Aggregation	Main ▼ MP ▼ Resource ▼	SCR - Tables -				
	Request"	SCR	Aggregation Assignment		EDRP		
	Request		Aggregation Request		Capability Period:	Summer 2010	
		Enrollments	Strike Price Management		Enrollment Requ	uests	
	OR	Under Review: 0			Pending:	0	
					View Requests		
		Aggregation Reques	ts				
•	From the	Pending: 1			Enrollments		
	Dashboard,	Approved: 1			Under Review:	0	
	select "View	Denied: 0			L		
	Requests"	Cancelled: 0					
	under	View Requests					
	Aggregation	L					
	Requests	Events					
	Requests	Date 🔺	Message				
							Total count: 0 🖲 Excel



Aggregation Request Screen

- Select any filter options from the drop-down lists
- Click "Display" to see existing Aggregation ID Requests

2	Building The Energy Markets Of TomorrowToday	Demand Response Information Aggregation Request	n System		
Main •	· MP ▼ Resource ▼ SCR ▼ Tables ▼				
	MP Name: NYISO Market Participant	Zone: All 🔽 Requests From:	Requests Till:	Status: All	Display
Aggre	egation Requests				
MP	Requested By Request	Date Aggregation ID Aggregation Name Zone Stri	ike Price Status Status Dat	e Updated By	Comments
				Total c	ount: 0 Approve Reject Cancel 🐴 Excel
Crea	ate Aggregation Request				
•	gregation Name: Zone: Strike Drice: This field is required) Click again to hide the error list	 This is not an error in DRIS Click for details Red outline means required field 			
©2009	New York Independent System Operator. All righ	ts reserved.			You are logged in as Name (Logout)



View Aggregation ID Requests

	EW YORK DEPENDENT STEM OPERATOR gy Markets Of Tomorro	Agaro	nd Respoi gation Reques	nse Informati ^{tt}	on Sys	tem				
Main ▼ MP ▼ Resource ▼ SC	and the boundary starts									
MP Name: NYISO	Market Participant	Zone: All	Requests Fr	rom:	Requests	Till:	Sta	atus: All	Dis	play
Aggregation Requests										
MP	Requested By	Request Date	Aggregation ID	Aggregation Name	Zone	Strike Price	Status	Status Update Date	Status Update By	Comments
NYISO Market Participant	Daniel Jackson	05/07/2010 17:28:56		Large Aggregation	J	500	Pending			
NYISO Market Participant	Daniel Jackson	05/03/2010 10:47:33	23416	Special Aggregation	F	499	Approved	05/10/2010	Samantha Carter	
Create Aggregation Requ	uest .								Total count: 0 Ap	prove Reject Cancel 🛋 Excel
Aggregation Name: Zone: Strike Price: Add U The form has errors (cl										
©2009 New York Independ	lent System Operato	or. All rights reserved.							You are l	ogged in as Name <u>(Logout</u>



Create an Aggregation ID Request

- Enter Aggregation Name, select Zone from the drop-down list and enter initial Strike Price
- Click "Add"

	EW YORK DEPENDENT STEM OPERATOR gy Markets Of TomorrowTo	Addre	n d Respoi gation Reques		nformation System	
Main • MP • Resource • So MP Name: NYISO		Zone: All	✓ Requests Fr	om:	Requests Till: Status: All	
Aggregation Requests						
MP NYISO Market Participant NYISO Market Participant	Daniel Jackson 05	equest Date 5/07/2010 17:28:56 5/03/2010 10:47:33	Aggregation ID 23416	Aggreg Large A Special	Create Aggregation Request	
					Aggregation Name: Ieral Aggregation Zone: J 🔽 Strike Price: 500	a) Excel
Create Aggregation Requ Aggregation Name: Zone: Strike Price: Add U The form has errors (c					Add Creen check mark means all required fields have been completed ©2009 New York Independent System Operator. All rights reserved.	
©2009 New York Independ	lent System Operator. A	ll rights reserved.			You are logged in as Name i	(Logout)



Aggregation ID Request List

- New Aggregation ID request is immediately added to the list
- Dashboard count is updated

	EW YORK DEPENDENT STEM OPERATOR gy Markets Of Tomorro	Addrey	nd Respo gation Reques	nse Informati st	on Sy:	stem				
Main ▼ MP ▼ Resource ▼ So	CR ▼ Tables ▼									
MP Name: NYISO	Market Participant	Zone: All	Requests F	rom:	Request	s Till:	S	tatus: All	Dis	play
Aggregation Requests										
МР	Requested By	Request Date	Aggregation ID	Aggregation Name	Zone	Strike Price	Status	Status Update	Status Update By	Comments
NYISO Market Participant	Daniel Jackson	05/08/2010 11:43:08		General Aggregation	J	500	Pending	Date		
NYISO Market Participant	Daniel Jackson	05/07/2010 17:28:56		Large Aggregation	J	500	Pending			
NYISO Market Participant	Daniel Jackson	05/03/2010 10:47:33	23416	Special Aggregation	F	499	Approved	05/10/2010	Samantha Carter	
			Main + MP +	Resource • SCR • Table	Of Tomorrow	D	mand R Pashboard	esponse	Informatio	on System
Create Aggregation Requ	Jest		SCR				EDR	P		
Aggregation Name:							📕 Cap	ability Period:	Summer 2010	
Zone:	×		Enrollme	nts			E	nrollment Reque	ests	
Strike Price:			Under Re	view: 0			P	ending:	0	
Add			Aggrega	tion Requests				/iew Requests		
O The form has errors (c	lick for details)		Pending:	2			E	nrollments		
			Approved	: 1			U	nder Review:	0	
©2009 New York Independ	lent System Operat	or. All rights reserved.	Denied:	0						
			Cancelled							



Aggregation Assignment

- Reassignment of SCR resources once they have been imported into DRIS
 - All SCRs require an initial aggregation ID in the import file
- Aggregation Assignment is a calendar event
 - Begins after SCR Enrollment Period ends
 - Ends before UCAP Report can be exported
- No changes to aggregation rules
 - Limited by zone, single strike price per aggregation ID, etc.



Managing Aggregation Assignments

From the SCR Menu, select "Aggregation Assignment"

	NEW YORK INDEPENDENT SYSTEM OPERATO Energy Markets Of Top	R norrowToday	Demand Dashboar		Information	n System
Main • MP • Resource	▼ SCR ▼ Tables ▼					
SCR	Aggregation /	Assignment 🖌		EDRP		
	Aggregation F			Capability Period:	Summer 2010	
Enrollments	Strike Price M	anagement		Enrollment Requ	iests	
Under Review:	0			Pending:	0	
Approved: Denied:	ests 1 1 0 0			View Requests	0	
Events Date	Message					
						Total count: 0 👫 Excel



Aggregation Assignment Screen

- Select any filter options from the drop-down lists
- Click "Display" to see Aggregation ID information

Demand Response Information	on System
Main ▼ MP ▼ Resource ▼ SCR ▼ Tables ▼	
Capability Period: Summer 2010 V Auction Month: May 2010 V MP Name: N	VISO Market Participant V Zone: All V Aggregation: All V Display
Aggregations	
	Total count: 0 🍕
Total count: 0 🔩 Excel	Total count: 0
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Aggregation Information

Capability Period: Summer 2010	Auction Month: May	/ 2010	MP Name: NYIS	O Market Participant	V Zone: All V Aggregation: All V Display
nggregations	Aggregation ID	7	Resource Count		
MP NYISO Market Participant	Aggregation ID 23416	Zone F	2	Ucap MW 10.3	
VISO Market Participant	41437	F G	4	28.81	Top pane displays aggregations
IYISO Market Participant	10267	J	3	15.31	based on selected search criteria
YISO Market Participant	13394	J	2	3.8	
YISO Market Participant	13395	J	7	18.32	Lower left and right panes are
IYISO Market Participant	13396	J	9	61	used for transfer of resources
VISO Market Participant	16680	J	5	10.2	from one aggregation ID to
VYISO Market Participant	16895	J	17	82.451	
IYISO Market Participant	32109	J	3	15.6	another
VYISO Market Participant	21745	к	10	3.504	Total aggregation count and
					ability to export each pane to Excel
					Total count: 10 🖲



Transferring Resources

- Drag one aggregation ID from the top pane into the lower left pane
 - DRIS displays the list of resources in the aggregation
 - Color of header of lower left pane matches color of selected aggregation ID row in top pane
 - Header identifies the aggregation ID, number of resources in the aggregation and total KW
- Drag the second aggregation ID from the top pane into the lower right pane
 - DRIS displays the list of resources
 - Header in the right pane is highlighted in another color
- Drag resources from one pane to another to reassign
 - Counts and totals will automatically update



Move One Aggregation into Left Pane

Capability Period: Summer 2010	Auction Month:	May 2010	MP Name:	NYISO Market Participa	nt 🗸 Zone: All 🗸 Aggregation: All 🖌 Display
ggregations					
MP	Aggregation ID	Zone	Resource Count	Ucap MW	
NYISO Market Participant	23416	F	2	10.3	
IYISO Market Participant	41437	G	4	28.81	
VYISO Market Participant	10267	J	3	15.31	I selected row
VYISO Market Participant	13394	J	2	3.8	
VYISO Market Participant	13395	J	7	18.32	
NYISO Market Participant	13396	J	9	61	
NYISO Market Participant	16680	J	5	10.2	
NYISO Market Participant	16895	J	17	82.451	While dragging an aggregation
NYISO Market Participant	32109	J	3	15.6	
NYISO Market Participant	21745	K	10	3.504	-
NYISO Market Participant	21745	K	10	3.504	change to indicate whether the action is permitted or not
			10	3.504	change to indicate whether the
Resources for Aggregation 13394		K 2 3800 kW	10	3.504	change to indicate whether the action is permitted or not
Resources for Aggregation 13394			10	3.504	change to indicate whether the action is permitted or not
Resources for Aggregation 13394 Resource ID Ucap kW			10	3.504	change to indicate whether the action is permitted or not
Resource ID Ucap kW 20901473 860			10	3.504	change to indicate whether the action is permitted or not



Move the Second Aggregation into Right Pane

Capability Period: Summer 2010	Y Auction Month: N	4ay 2010	MP Name:	NYISO Market Particip	ant 💌	Zone: All	~ /	Aggregation	: All	~	Display	
gregations												
IP	Aggregation ID	Zone	Resource Count	Ucap MW								
IYISO Market Participant	23416	F	2	10.3								
YISO Market Participant	41437	G	4	28.81								
IYISO Market Participant	10267	J	3	15.31								
YISO Market Participant	13394	J	2	3.8								
YISO Market Participant	13395	J	7	18.32								
IYISO Market Participant	13396	J	9	61								
IYISO Market Participant	16680	J	5	10.2								
YISO Market Participant	16895	J	17	82.451								
IYISO Market Participant	32109	J	3	15.6								
IVICO Markat Dartisinant												
	21745	К	10	3.504								
	21745	Κ	10	3.504							Tetel	course 10
					or Aggregati	on 16680	Ro		ount 5	llear		
esources for Aggregation 13394				Resources for		on 16680	Re	source Co	ount 5	Ucaț	Total	
esources for Aggregation 13394				Resources for Resource ID	Ucap kW		Re	source Co	ount 5	Ucap		
esources for Aggregation 13394 source ID Ucap kW 20901473 860				Resources for Resource ID 21151190	Ucap kW 3200		Re	source Co	ount 5	Ucaț		
esources for Aggregation 13394				Resources for Resource ID 21151190 21311202	Ucap kW 3200 550		Re	source Co	ount 5	Ucaț		
esources for Aggregation 13394 source ID Ucap kW 20901473 860				Resources fr Resource ID 21151190 21311202 21139788	Ucap kW 3200 550 1000		Re	source Co	ount 5	Ucaț		
esources for Aggregation 13394 source ID Ucap kW 20901473 860				Resources for Resource ID 21151190 21311202 21139788 30025743	Ucap kW 3200 550 1000 5420		Re	source Co	ount 5	Ucaț		count: 10 🖷 a
20901473 860				Resources fr Resource ID 21151190 21311202 21139788	Ucap kW 3200 550 1000		Re	source Co	ount 5	Ucaț		



Resource Assignment Error Message

 If the user attempts to transfer resources from an aggregation ID in one zone to an aggregation ID of another zone, the following error message will display

Error
Cannot move a resource to an aggregation in a different zone.
OK OK



Aggregations after Resource Reassignment

n ▼ MP ▼ Resource ▼ SCR ▼ Tables ▼	•											
Capability Period: Summer 2010	✓ Auction Month:	May 2010	Y MP Name	: NYISO Market Parti	icipant 💌	Zone: All	v ¢	ggregation:	All	~	Display	
gregations												
P	Aggregation ID	Zone	Resource Count	Ucap MW								
YISO Market Participant	23416	F	2	2 10.3								
(ISO Market Participant	41437	G	4	28.81								
YISO Market Participant	10267	J	3									
(ISO Market Participant	13394	J	3									
YISO Market Participant	13395	J	7									
YISO Market Participant	13396	J	S	-								
YISO Market Participant	16680	J	4									
YISO Market Participant	16895	J	17									
YISO Market Participant	32109	J										
YISO Market Participant	21745			3.504								
YISO Market Participant	21745	K	10									
		K	10	3.504		tion 1669	0 8		ount 4	Licon	Total count	:10
tesources for Aggregation 13		K		Resource	s for Aggrega	tion 1668	0 R	esource C	ount 4	Исар	Total count	:10
esources for Aggregation 13		K	10	Resource Resource	ID Ucap kW		0 R	esource C	ount 4	Исар		:10 🛋
Resources for Aggregation 13 esource ID Ucap kW 20901473 860		K	10	Resource 213112	ID Ucap kW 02 55	0	0 R	esource C	ount 4	Исар		:10
Resources for Aggregation 13esource IDUcap kW20901473860211511903200		K	10	Resource 213112 211397	ID Ucap kW 02 55 88 100	0	0 R	esource C	ount 4	Ucap		:10
esources for Aggregation 13 esource ID Ucap kW 20901473 860		K	10	Resource 213112 211397 300257	ID Ucap kW 02 55 88 100 43 542	0	0 R	esource C	ount 4	Ucap		:10
20901473 860 21151190 3200		K	10	Resource 213112 211397	ID Ucap kW 02 55 88 100 43 542	0	0 R	esource C	ount 4	Ucap		:10 🖷



Strike Price Management

• From the SCR Menu, select "Strike Price Management"

	NEW YORK INDEPENDENT SYSTEM OPERATOR Energy Markets Of TomorrowToday	Demand Response Information System
Main▼ MP▼ Resource	▼ SCR ▼ Tables ▼	
SCR	Aggregation Assignment	EDRP
Enrollments	Aggregation Request Strike Price Management	Capability Period: Summer 2010
Under Review:	0	Pending: 0 View Requests
Aggregation Reque	ests	
Pending:	1	Enrollments
Approved:	1	Under Review: 0
Denied:	0	
Cancelled:	0	
View Requests		_
Events		
Date 🔺	Message	
		Total count: 0 🖷 Excel



Strike Price Management Page

- Select any filter options from the drop-down lists
- Click "Display" to see Strike Price records for Aggregation IDs

Building The Energy Markets Of TomorrowToda	Demand Response Information System Strike Price Management	
Main ▼ MP ▼ Resource ▼ SCR ▼ Tables ▼		
MP; NYISO Market Participant	ione: All 🗸 Aggregation: All 🖍 Display	
Strike Prices		
	Total count: 0 Add Delete a Exc	;el



Strike Price List by Aggregation ID

trike Prices	icipant 🔽 💈	Zone: All	Y Aggregati	on: All 💌	Display		
MP	Aggregation	Zone	Strike Price	Start Month	End Month	Last Updated By	Last Update Date
NYISO Market Participant	13394	К	500	11/01/2009		Daniel Jackson	10/01/2009 10:17:45
NYISO Market Participant	21745	F	500	11/01/2009		Daniel Jackson	10/19/2009 17:28:56
IYISO Market Participant	16680	J	500	11/01/2009		Daniel Jackson	10/23/2009 09:19:24
IYISO Market Participant	32109	С	500	11/01/2009		Daniel Jackson	10/30/2009 14:37:28



Changing a Strike Price

- To change a Strike Price for an Aggregation ID
 - Click the "Add" button in the lower right portion of the screen
 - Select the Start Month for the new Strike Price
 - Select the Aggregation ID from the drop-down list
 - Enter the Strike Price amount
 - DRIS returns a confirmation message
- Only one strike price per month per Aggregation ID
 - Attempts to add a second Strike Price for the same month will produce an error message
 - Delete the Strike Price entered for the month
 - Select the Strike Price record for the Aggregation ID
 - Click the "Delete" button in the lower right portion of the screen
 - Add the intended Strike Price for the month



Adding A Strike Price to An Aggregation ID

Building The Energy Marke	PERATOR	Demand Response Informa Strike Price Management	atior	n System	
Main ▼ MP ▼ Resource ▼ SCR ▼ Tak		Zone: All 🗸 Aggregation: All 🗸 Dis	play		
	ipon it		рау		
Strike Prices MP	Aggreg	Create	nth	Last Updated By	Last Update Date
NYISO Market Participant	13394			Daniel Jackson	10/01/2009 10:17:45
NYISO Market Participant	21745	Start Month:		Daniel Jackson	10/19/2009 17:28:56
NYISO Market Participant	16680	June 2010 👻		Daniel Jackson	10/23/2009 09:19:24
NYISO Market Participant	32109	Aggregation:		Daniel Jackson	10/30/2009 14:37:28
		Create Cancel		Total count: 4	Add Delete A Excel



Strike Price Messages



ere was an error c	reating Strike Price rec	ord.	
field Name	Field Value	Exception Code	Unique Id
Start Month	Tue Jun 01 04:00:0	0 Start Month must be greater than the Start Month of the latest existing strike price	Start Month



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